



Owner's Manual for the Vehicle.
With a quick reference guide
for your convenience.





M3

We are pleased you have decided on a BMW M3.

Thorough familiarity with your vehicle will provide you with enhanced control and security when you drive it. We therefore have this request:

Please read the information summarized for you in this Owner's Manual, before starting off in your new BMW M3. It contains important instructions for operating your vehicle that will allow you to get the most out of your BMW M3's technologically advanced qualities. In addition, you will find information on maintenance and care, there to ensure operating and driving safety, as well as to maintain the best possible value of your vehicle.

BMW M also makes a decisive contribution toward greater safety in traffic through its BMW driver training.

This Owner's Manual should be considered a permanent part of this vehicle. It should stay with the vehicle when sold to provide the next owner with important operating, safety and maintenance information.

This manual is supplemented by a Service and Warranty Information Booklet (US models) or a Warranty and Service Guide Booklet (Canadian models). We recommend that you read this publication thoroughly.

Your BMW M3 is covered by the following warranties:

- New Vehicle Limited Warranty
- Limited Warranty Rust Perforation
- Federal Emissions System Defect Warranty
- Federal Emissions Performance Warranty
- California Emission Control System Limited Warranty

Detailed information about these warranties is listed in the Service and Warranty Information Booklet (US models) or in the Warranty and Service Guide Booklet (Canadian models).

We wish you an enjoyable driving experience.

BMW M

Notes on the Owner's Manual

We have made every effort to ensure that you are able to find what you need in this Owner's Manual as quickly as possible. The fastest way to find certain topics is by using the detailed index at the end. If you wish to gain only an initial overview of your vehicle, you will find this in the first chapter.

The table of contents is intended to pique your interest regarding your BMW and to encourage you to read the manual.

Should you wish to sell your BMW at some time in the future, please remember to hand over this Owner's Manual to the new owner; it is part of the vehicle.

Should you have any further questions, your BMW center will be glad to assist at any time.

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Symbols used



Indicates instructions or precautions that must be followed precisely in order to avoid the possibility of personal injury and serious damage to the vehicle. ◀



Contains information that will assist you in gaining the optimum benefit from your vehicle and enable you to care more effectively for your vehicle. ◀



Refers to measures that can be taken to help protect the environment. ◀

◀ Marks the end of a specific item of information.

* Indicates special equipment, country-specific equipment and optional extras.



Identifies index entries that refer to owner service procedures or topics on car care.



Identifies systems or components, which your BMW center can either activate or adapt to suit an individual driver's requirements ("Car Memory", "Key Memory"). Refer to page 52. ◀

Your individual vehicle

On buying your BMW, you have decided in favor of a model with individualized equipment and features. This Owner's Manual describes all of the equipment that the BMW M3 has to offer you.

We hope you will understand that equipment and features are included that you might not have chosen for your vehicle. You can easily spot any possible differences, since all optional accessories are marked with an asterisk *.

If your BMW features equipment that is not described in this Owner's Manual (a car radio or telephone, for instance), we have enclosed Supplementary Owner's Manuals. We ask you to read these manuals as well.

Status at time of printing

BMW pursues a policy of continuous, ongoing development conceived to ensure that our vehicles continue to embody the highest quality and safety standards combined with advanced, state-of-the-art technology. For this reason, it is possible that the features described in this Owner's Manual could differ from those on your vehicle. Nor can errors and omissions be entirely ruled out. You are therefore asked to appreciate that no legal claims can be entertained on the basis of the data, illustrations or descriptions in this manual.

For your own safety



Use unleaded gasoline only. Fuels containing up to and including 10% ethanol or other oxygenates with up to 2,8% oxygen by weight (i.e. 15% MTBE or 3% methanol plus an equivalent amount of co-solvent) will not void the applicable warranties respecting defects in materials or workmanship. Field experience has indicated significant differences in fuel quality (volatility, composition, additives, others) among gasolines offered for sale in the United States and Canada. The use of poor quality fuels may result in drivability, starting and stalling problems especially under certain environmental conditions, such as high ambient temperature and high altitude. Should you encounter driveability problems which you suspect could be related to the fuel you are using, we recommend that you respond by switching to a recognized high-quality brand. Failure to comply with these recommendations may result in unscheduled maintenance. Obey pertinent safety rules when you are handling gasoline. ◀



Important safety information.

For your own safety, use genuine parts and accessories approved by BMW. When you purchase accessories tested and approved by BMW and Original BMW Parts, you simultaneously acquire the assurance that they have been thoroughly tested by BMW to ensure optimum performance when installed on your vehicle.

BMW warrants these parts to be free from defects in material and workmanship.

BMW will not accept any liability for damages resulting from installation of parts and accessories not approved by BMW.

BMW cannot test every product made by other manufacturers to verify if it can be used on a BMW safely and without risk to either the vehicle, its operation, or its occupants.

Original BMW Parts, BMW Accessories and other products approved by BMW, together with professional advice on using these items, are available from all BMW centers.

Installation and operation of non-BMW approved accessories such as alarms, radios, amplifiers, radar detectors, wheels, suspension components, brake dust shields, telephones (including operation of any portable cellular phone from within the vehicle without using an externally mounted antenna) or transceiver equipment (such as CB, walkie-talkie, ham radio or similar) may cause extensive damage to the vehicle, compromise its safety, interfere with the vehicle's electrical system or affect the validity of the BMW Limited Warranty. See your BMW center for additional information.

Do not use a key or remote control to lock doors or luggage compartment with anyone inside the car. See page 34 for more details. ◀

Symbol on vehicle parts



Indicates that you should consult the relevant section of this Owner's Manual for information on a particular part or assembly.

The following applies only to vehicles owned and operated in the US.

REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying BMW of North America, Inc., P.O. Box 1227, Westwood, New Jersey 07675-1227, Telephone (201) 307-4000.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or BMW of North America, Inc.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about engine vehicle safety from the Hotline.



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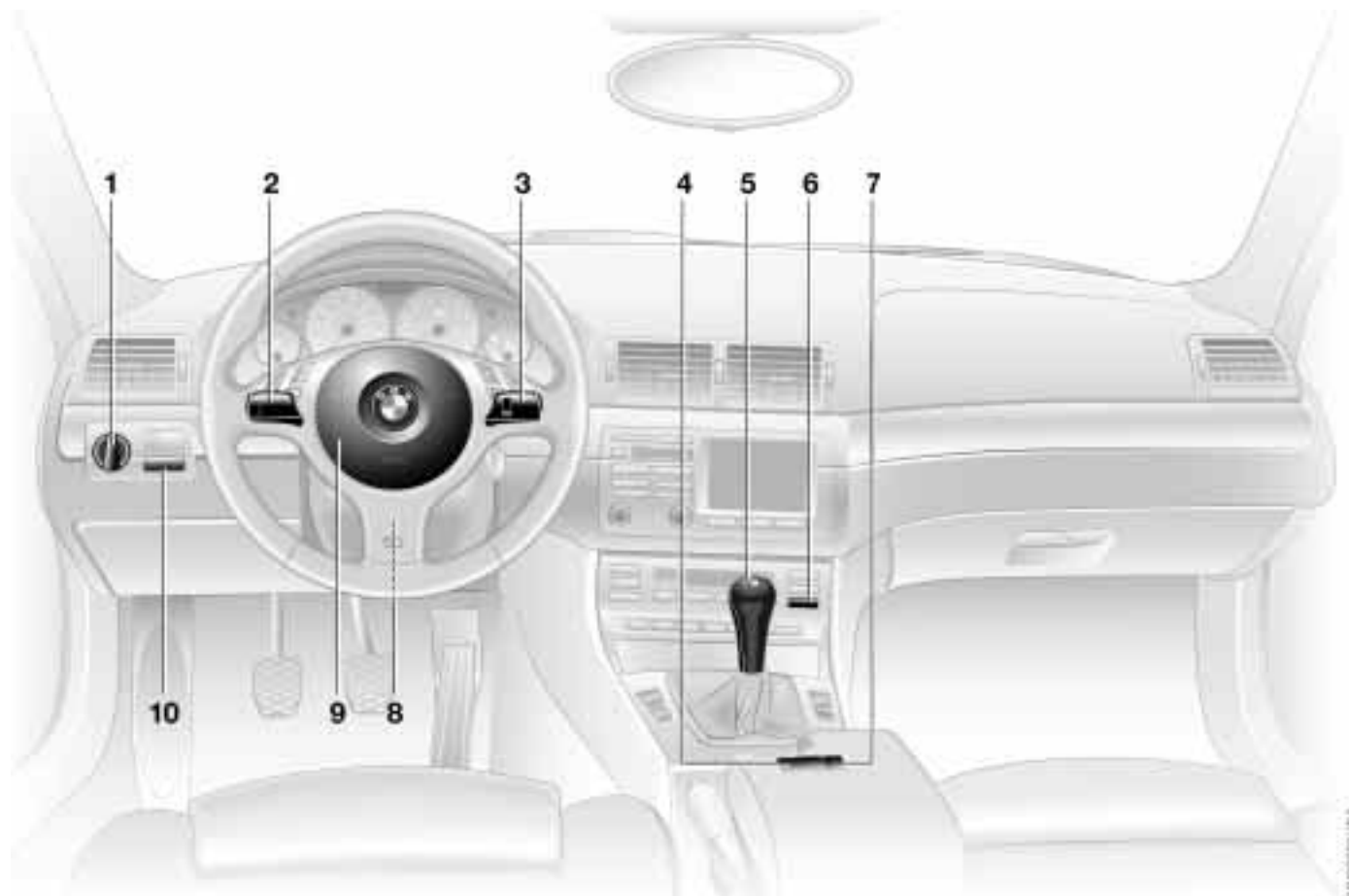
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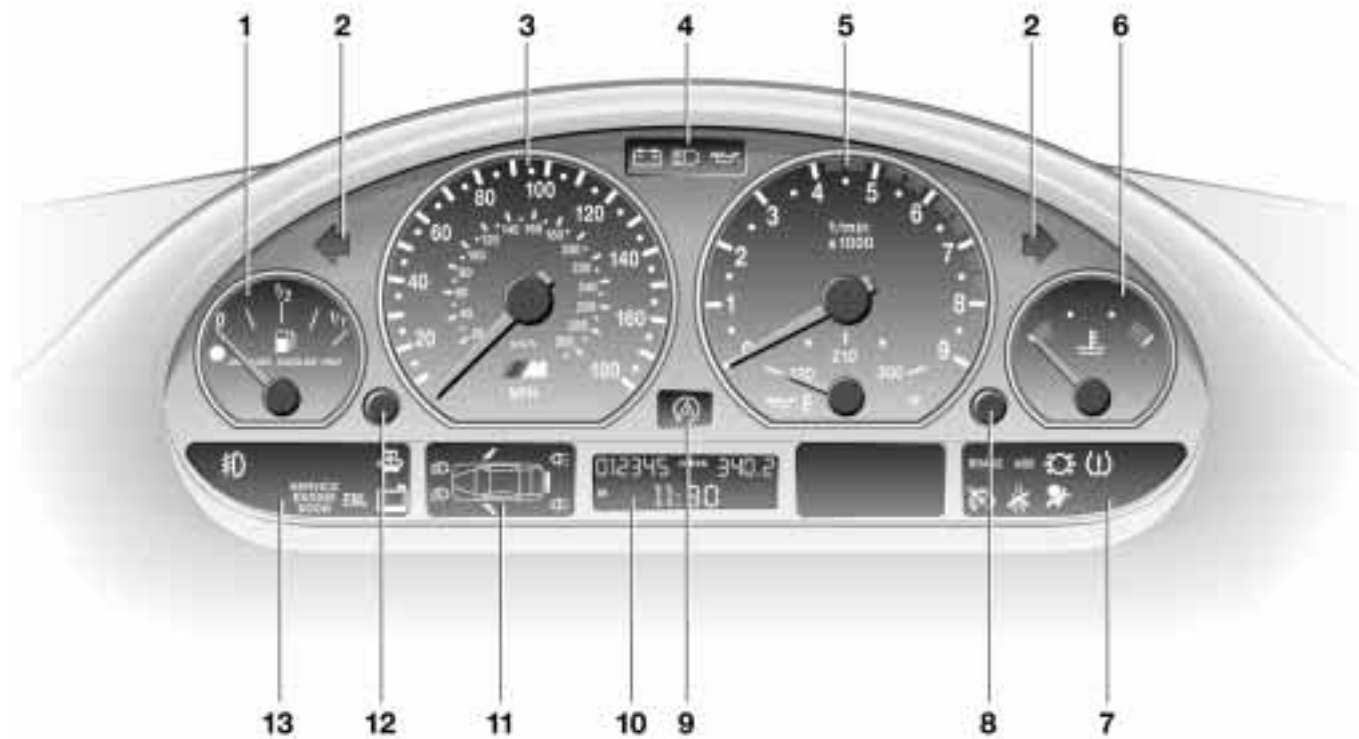
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Instrument cluster

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You can have the outside temperature and distance traveled shown in other units of measurement. ◀

Technology that monitors itself

Many of the systems of your BMW monitor themselves automatically, both during engine starts and while you are driving. Indicator and warning lamps that are identified by "●" are tested for proper functioning whenever the ignition key is turned. They each light up once for different periods of time.

If a fault should occur in one of these systems, the corresponding lamp does not go out after the engine is started or it lights up while the vehicle is moving. You will see how to react to this below.

Red: stop immediately



Battery charge current ●
The battery is no longer being charged. There is a malfunction of the alternator drive belt or in the charging circuit of the alternator. Please contact the nearest BMW center.



If the drive belt is defective, do not continue driving. The engine could be damaged due to overheating. If the V-belt is defective, increased steering effort is also required. ◀



Engine oil pressure ●
Stop vehicle immediately and switch off engine. Check the engine oil level and top up as required. If the oil level is correct: please contact the nearest BMW center.



Do not continue driving, otherwise, the engine could be damaged because of inadequate lubrication. ◀



Tire Pressure Warning (RDW)
In addition, an acoustic signal is sounded: a flat tire has occurred. To come to an immediate stop, reduce speed, while avoiding any sudden, jerky braking or steering maneuvers.
For additional information, refer to page 78.



Brake hydraulic system ●
If the lamp comes on when the parking brake is not engaged: Check the brake fluid level. Before driving further, be sure to read the additional information on pages 107 and 126.



Brake lamp for Canadian models.

Red: an important reminder



Parking brake

Comes on when the parking brake is applied – an additional acoustic signal sounds when starting off.

For additional information, refer to page [63](#).



Parking brake lamp for Canadian models.



Please fasten safety belts ●

A warning signal will sound at the same time. Lights up for a few seconds or until the safety belt is fastened.

For additional information on safety belts, refer to page [54](#).



Airbags ●

Please have the system inspected by your authorized BMW center.

For additional information, refer to pages [56](#), [158](#).

Red and yellow: continue driving cautiously



If the brake warning lamp comes on together with the yellow indicator lamps for ABS and DSC:

The entire ABS, CBC and DSC control system has failed.

Continue driving cautiously and defensively. Avoid hard brake applications. Please have the system checked by your BMW center as soon as possible.

For additional information, refer to pages [76](#), [105](#).



ABS, CBC and DSC indicator and warning lamps for Canadian models.

Yellow: check as soon as possible



Antilock Brake System (ABS) ●
ABS has been deactivated in response to system malfunction.

Conventional braking efficiency is available and unrestricted. Please have the system inspected by your BMW center. For additional information, refer to page [104](#).



ABS warning lamp for Canadian models.



Engine oil level

Lights up while driving:

The oil level is at the absolute minimum; therefore, add engine oil as soon as possible. Do not drive more than 30 miles (50 km) until you do. For additional information, refer to page [123](#).



Engine oil level

Comes on after the engine has been shut off: add more engine oil the next time you stop for gas. For additional information, refer to page [123](#).



Brake pads ●

Have the brake pads checked. For additional information, refer to page [107](#).

22 Indicator and warning lamps



Tire Pressure Warning (RDW) ●

RDW has been switched off or has been deactivated because of a malfunction. In the event of a malfunction, have the system checked by your BMW center.

For additional information, refer to pages [26](#), [78](#).



Dynamic Stability Control (DSC) ●

The indicator lamp flashes when the system is active and governs drive force and braking force.

If the indicator lamp fails to go out after the engine is started, or if it comes on during normal driving and stays on: DSC has been switched off via the button or because of a malfunction. In the event of a malfunction, have the system checked by the nearest BMW center.

For additional information, refer to page [76](#) and on.



Add washer fluid

The washer fluid is too low.

Top up the fluid at the earliest opportunity.

For additional information, refer to page [122](#).



Service Engine Soon ●

If the indicator lamp comes on either continuously or intermittently, this indicates a fault in the emissions-related electronic systems.

Although the vehicle remains operational, you should have the systems checked by your BMW center at the earliest possible opportunity.

For additional information, refer to page [135](#).



Warning lamp: Service Engine Soon for Canadian models.



Engine electronics ●

There is a fault in the engine's electronic control system. The electronics allow for continued driving with reduced engine output or speed. Please have the system inspected by your BMW center.



Add coolant

The coolant level is too low. Add coolant at the earliest opportunity.

For additional information, refer to page [125](#).

Green: for your information



Turn signal indicator

Flashes when the turn signal is on. Rapid flashing: indicates a system malfunction.

For additional information, refer to page [65](#).



Cruise control

Lights up when the cruise control is activated. Available for operation via the multifunction steering wheel (MFL).

For additional information, refer to page [67](#).



Fog lamps

Lights up whenever fog lamps are on.

For additional information, refer to page [82](#).

Blue: for your information



High beams


Lights up when the high beams are on or the headlamp flasher is actuated.

For additional information, refer to pages [65](#), [82](#).

Multifunction steering wheel (MFL)

The buttons integrated in the multifunction steering wheel (MFL) are provided so that you can operate a number of accessories quickly and without being distracted from traffic conditions. You may operate:

- ▷ Selected radio functions
- ▷ the cruise control
- ▷ selected cellular phone functions*
- ▷ the voice recognition*.

 In order to operate a system via the MFL, the corresponding system controls must be switched on. ◀




- | | |
|--|--|
| 1 Horn, entire surface | 7 Cruise control: activate stored setting (resume) |
| 2 Radio/Cellular phone: select | 8 Cruise control: accelerate and store (+) as well as decelerate and store (-) |
| 3 Press briefly:
Cellular phone: receive a call, initiate dialing, terminate a call
Press longer:
Turn the voice recognition on and off | 9 Cruise control: activate/interrupt/deactivate |
| 4 Radio/Cellular phone: volume | |
| 5 Radio/Cellular phone: scan backward or scan station keys or scroll through the phone listings | |
| 6 Radio/Cellular phone: scan forward or scan station keys or scroll through the phone listings | |



Switching on and off:
Press button.


The button flashes intermittently when the hazard flashers are on.

To help you locate the button in an emergency, the button is also illuminated whenever the car lamps are on.

 The turn signal function takes precedence over the warning lamp function. Starting with ignition key position 1, you are therefore able to use the turn signal, even if the hazard warning system has been activated. ◀



The hazard warning triangle is stored on the left-hand side in the luggage compartment.


 Comply with legal requirements that cover the availability of a hazard warning triangle in the vehicle. ◀



The first-aid kit is located under the front passenger's seat.

To open: pull the handle and fold the cover down.

To fasten: fold the cover up.

 Some of the articles in the first-aid kit may be used within a limited time only. For this reason, check the expiration dates of each of the items regularly, and replace any whose expiration dates have passed. You can acquire replacements in any drugstore or pharmacy. Comply with legal requirements regarding keeping a first-aid kit in the vehicle. ◀



Fuel filler door

⚠ Before filling the tank, shut off the engine. If you do not, fuel cannot flow into the tank and the "Service Engine Soon" lamp may come on. ◀

Press on the rear edge of the fuel filler door to open and close it.

To unlock if the central locking system malfunctions, refer to page [152](#)

⚠ When handling fuels, comply with all of the applicable safety precautions and regulations pertaining to fuels.

Never carry spare fuel containers in your vehicle. Whether empty or full, these containers can leak, cause an explosion, or lead to fire in the event of a collision. ◀



Simple and friendly to the environment

⚠ Open the filler cap carefully to prevent fuel from spraying out. Fuel spray may cause injury. ◀

Keep the filler cap in the bracket attached to the fuel filler door.

When refueling, insert the filler nozzle completely into the filler pipe. Pulling the nozzle out of the pipe during refueling

- ▷ results in premature pump shutoff
- ▷ and will reduce the effect of the vapor recovery system on the pump.

As long as the filler nozzle is used properly, the fuel tank is full whenever the nozzle shuts off the first time.

Tank capacity, refer to page [169](#).

⚠ Close the fuel cap carefully after refueling until a "click" is heard. While closing, be sure not to squeeze the strap which is fastened to the cap. A loose or missing cap will activate the Service Engine Soon warning lamp. ◀

26 Fuel specifications

Refuel with lead-free

The engine uses lead-free gasoline only.

Required fuel:

- ▷ Premium Unleaded Gasoline, min. 91 AKI
AKI = Anti Knock Index



Do not use leaded fuels. The use of leaded fuels will cause permanent damage to the system's oxygen sensor and the catalytic converter. ◀

Tire inflation pressure



Proper inflation pressures are on a sticker attached to the B-pillar and visible with the driver's door open.

Check tire pressures

On the next page you will find all the tire pressure specifications, for tires at ambient air temperature, stated in the units usually used in your country (psi; kilopascal).

After correcting the tire inflation pressure, re-initialize the Tire Pressure Warning system (RDW) so that it can monitor the tire inflation pressure, refer to page [78](#).





Check tire inflation pressures regularly – at least every two weeks and before beginning a longer trip.

Incorrect tire pressure can otherwise lead to driving instability, tire damage and accidents. ◀

Comply with tire approval specifications

The inflation pressures in the table apply to tires made by BMW-approved manufacturers. Your BMW center is familiar with these pressures. Higher pressures may be specified for tires from other manufacturers. You will find a list of approved tire sizes on page [116](#).

Your vehicle is equipped with tires that not only meet US standards, but also European standards. We recommend the exclusive use of BMW-approved tires.

<div>Tires</div> <div>All pressure specifications in the table are indicated in psi (kilopascal) for cold tires (cold = ambient temperature)</div>				
				
225/45 ZR 18	33 (230)	-	41 (280)	-
255/40 ZR 18	-	35 (240)	-	48 (330)
225/45 R 17 91 H M+S	33 (230)	38 (260)	36 (250)	46 (320)

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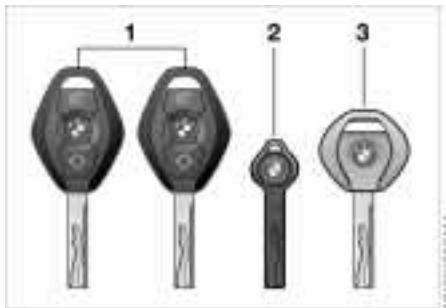
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The key set

- 1 Master key with remote control
This key sets the functions for Key Memory. Refer to page [52](#)

 There is an extended-life battery in every master key that is charged automatically in the ignition lock as you drive. For this reason, if you have a master key that is otherwise not used, use that key at least once every year while driving for an extended period to charge the battery. Refer also to page [33](#). ◀


- 2 Spare key for storage in a safe place, such as in your wallet. This key is not intended for continuous use

3 Door key

The locks for the luggage compartment lid and the glove compartment cannot be operated with this key – this is recommended for valet parking, for instance.

Replacement keys

are available exclusively through your BMW center. Since the keys are part of a security system, vehicle ownership must be checked before a replacement key can be issued (refer to "Electronic vehicle immobilizer" on page [31](#)).

 If possible, take all of the master keys that belong to the vehicle with you when you pick up your replacement key. Whenever you receive a new replacement key, turn that key to position 2 in the ignition lock once (ignition switched on) and then back. This allows the electronic vehicle immobilizer to "learn" the new key. ◀




The key to security

Your BMW is equipped with a passive anti-theft system. This electronic immobilization system is designed to reduce the susceptibility of your vehicle to theft by making it impossible to start the engine using any means other than the special keys furnished with the vehicle. Your BMW center can cancel the electronic system authorization for individual keys (in the event of loss, for instance). A deactivated key can no longer be used to start the engine.

How the electronics work

At the heart of this system is an electronic chip which is integrated into the key. The lock mechanism itself is actually a dual-function device, simultaneously serving as a communications interface designed to allow the security system to maintain a continuous stream of variable, vehicle-specific signals with the electronic circuitry in the key. The system will not release the ignition, fuel injection and starter unless it recognizes an "authorized" key.

 Force applied to the key can damage the integrated electronic circuitry. A damaged key can no longer be used to start the engine. ◀

The concept

The system engages and releases the locks on the:

- ▷ Doors
- ▷ Luggage compartment lid
- ▷ Fuel filler door.

The central locking system is ready for operation whenever the driver's door is closed. The central locking system can be operated

- ▷ from outside via the door lock and using the remote control
- ▷ from inside by pressing a button.

If it is operated from inside, the fuel filler door will not be locked (refer to page 36).

When the system is actuated from outside the vehicle, the anti-theft protection is simultaneously activated. Both the door locks and release handles remain locked. The alarm system is also activated or deactivated.

For your safety: if locked from inside, the central locking system unlocks automatically in the event of an accident. In addition, the hazard warning flashers and interior lamps come on.

32 Opening and closing – via the door lock



Convenience operating mode

You can also open the electric windows and the sliding/tilt sunroof via the door lock.

With the door closed, turn the key to the "Unlock" position and hold it.

Manual operation

(in the event of electrical malfunction)

Turn the key all the way to the extreme left or right to unlock/lock the door.

Using the key

Turning the key once in the driver's door will unlock only the driver's door. Turning the key a second time will unlock the passenger's door, the luggage compartment lid and the fuel filler door.



You can have a signal set as an acknowledgment message that the vehicle is closed correctly. ◀


Opening and closing – via the remote control

The concept

The remote control makes opening and locking the doors of your vehicle very convenient. Furthermore, it provides two additional functions which you can only execute via the remote control:

- ▷ Switch on the interior lamps, refer to page 34.
With this function, you can also "search" for your vehicle – when parked in an underground garage, for instance
- ▷ Open the luggage compartment lid.
Refer to page 34.
The luggage compartment lid will open slightly, regardless of whether it was locked or unlocked.

The anti-theft system is also deactivated/activated simultaneously with the unlocking or locking of the vehicle, and the alarm system is disarmed/armed, and the interior lamps are switched on/off.

 You can have a signal set as an acknowledgment message that the vehicle is closed correctly. ◀



Master keys

Keys with remote control are master keys. Refer to page 30.



Children might be able to lock the doors from the inside. For this reason, always take the vehicle keys with you so that the vehicle can be opened again from the outside at any time. ◀



Master keys that are used repeatedly are always ready for operation since the battery in the key is charged automatically in the ignition lock as you drive.

If it is no longer possible to unlock the vehicle via the remote control, the battery is discharged. Use this key while driving for an extended period in order to charge the battery. Refer also to page 30.

Guard the remote control against unauthorized use by only surrendering the spare key or the door key (refer to page 30) e.g. for valet parking. In the event of a system malfunction, please contact your BMW center. You can also obtain replacement keys there. ◀

34 Opening and closing – via the remote control



To unlock the vehicle

Press button 1.

After unlocking the driver's door, press button 1 again to unlock the entire vehicle.

Convenience opening mode

Press and hold button 1. The windows and the sliding/tilt sunroof are opened.

To lock and secure

Press button 2.



To switch on the interior lamps

After locking the vehicle, press button 2.

To deactivate the alarm system tilt sensor and interior motion sensor

Press button 2 a second time immediately after locking.

For additional information, refer to page [41](#).



To open the luggage compartment lid

Press button 3.

The lid will open slightly, no matter whether it was locked or unlocked.



Before and after a trip, be sure that the luggage compartment lid was not opened unintentionally. ◀

Panic mode (trigger alarm)

By pressing button 3 for more than two seconds, the alarm can be sounded in the event of danger, if it is armed. Pressing on button 1 will turn the alarm off.

External systems

The proper functioning of the remote control system may be affected by other units or equipment operating in the immediate vicinity of your vehicle.

If this should occur, you can still open and close the vehicle using the master key in both the door and luggage compartment locks.

For US owners only


The transmitter and receiver units comply with part 15 of the FCC (Federal Communication Commission) regulations. Operation is governed by the following:

FCC ID: LX8EWS
LX8FZVS
LX8FZVE

Compliance statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:


- ▷ This device may not cause harmful interference, and
- ▷ this device must accept any interference received, including interference that may cause undesired operation.


 Any unauthorized modifications to these devices could void the user's authority to operate the equipment. ◀

36 Opening and closing – from the inside



Use this button to operate the central locking system whenever the doors are closed. The doors and luggage compartment lid are unlocked or locked only. The antitheft alarm system is not activated.

 If only the driver's door was locked from the outside and you press the button, then, when you open the driver's door, the passenger's door, the luggage compartment lid and the fuel filler door will unlock as well. The driver's door will be locked if it is closed. ◀

 The central locking system can be unlocked automatically as soon as you begin to drive if you desire. You may also have this adjusted so that it is specific to keys. ◀

To unlock and open the doors

- ▷ Either unlock the doors together with the button for the central locking system and then pull each of the release handles above the armrests or
- ▷ pull the release handle for each door twice: the first pull unlocks the door, and the second one opens it.

To engage locks

- ▷ Either use the central locking button to lock all doors at once or
- ▷ press down the individual door lock buttons. As an added design feature to prevent the driver from being inadvertently locked out of the vehicle, the driver's door lock button will not engage as long as the door is open.



Children might be able to lock the doors from the inside. For this reason, always take the vehicle's keys with you so that the vehicle can be opened again from the outside at any time. ◀



The lock

Only the master keys (refer to page 30) fit in the lock for the luggage compartment lid.

To secure separately

Turn the master key to the right past the resistance point and then pull it out in the horizontal position.

This locks the luggage compartment lid and disconnects it from the central locking system. If you surrender only the door key (refer to page 30), this will prevent unauthorized access via the luggage compartment lid. This is convenient for valet parking, for instance.

To open from outside

Press the button in the handle recess (arrow): the luggage compartment lid opens slightly.

The luggage compartment is lighted when the luggage compartment lid is opened.

Manual operation

(in the event of electrical malfunction)

Turn the master key to the left to the stop – the luggage compartment lid will open slightly.

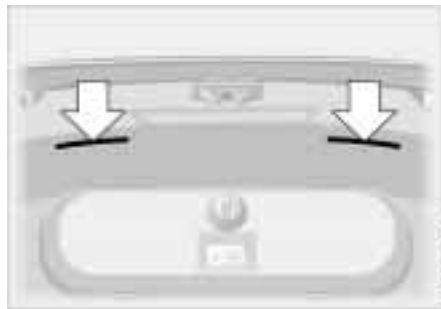
The luggage compartment is locked again as soon as you close the lid.

38 Luggage compartment lid




To opening from the inside


If the luggage compartment lid has not been locked separately, you can open it with this button in the footwell on the driver's side when the vehicle is stationary.



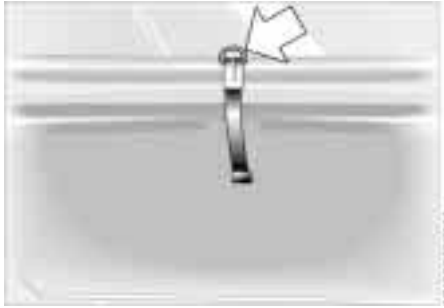
To close

The handle recesses in the interior trim panel of the luggage compartment lid (arrows) make it easier to pull the lid down.

 To avoid injuries, be sure that the travel path of the luggage compartment lid is clear when it is closed, as with all closing procedures. ◀

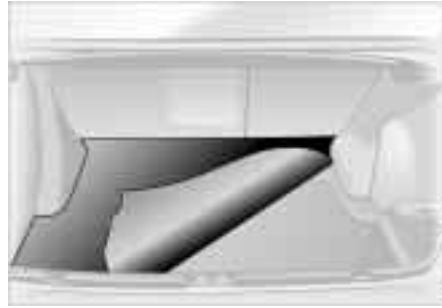
 Operate the vehicle only when the luggage compartment lid is completely closed. Otherwise, exhaust fumes could penetrate the interior of the vehicle. Should it be absolutely necessary to operate the vehicle with the luggage compartment lid open:

- ▷ Close all windows. Shut the sliding/tilt sunroof.
- ▷ Increase the airflow of the automatic climate control to a high level. Refer to page 84. ◀



Floor panel

To raise and secure the floor panel, lift it by the ring and hook it into the rubber seal of the run-off gutter with the hanger (arrow).



Floor mat

You can turn the floor mat over if required (for transporting soiled objects for instance). The rubberized side may be washed. It reduces movement of objects placed on it.

The fittings at the inner corners of the luggage compartment provide you with a convenient means of attaching luggage nets* and flexible straps for securing suitcases and luggage.

Refer also to "Cargo loading," page [97](#).

The concept

The vehicle alarm system responds:

- ▷ When a door, the hood or the luggage compartment lid is opened.
- ▷ To movement inside the vehicle (interior motion sensor).
- ▷ Altering the angle of the vehicle tilt sensor, e.g. as would occur while attempting to steal the wheels or tow the vehicle (tilt sensor alarm system).
- ▷ To interruption of battery voltage.

The system responds to unauthorized vehicle entry and attempted theft by simultaneously activating the following:

- ▷ Sounding an acoustical alarm for 30 seconds.
- ▷ Activating the hazard warning flashers for approx. five minutes.
- ▷ Flashing the high beams on and off in rhythm with the hazard warning flashers.

To activate and deactivate the alarm system

When the vehicle is locked or unlocked by using a key or the remote control, the alarm system is also simultaneously armed or disarmed.

The interior motion sensor and the alarm system tilt sensor are activated approx. 30 seconds after the last door has been locked.

If the alarm system has been armed correctly, the hazard warning flashers flash once.



You can have a signal set as acknowledgment for both setting and deactivating the alarm. ◀

You can also open the luggage compartment lid when the system is armed by pressing button 3 of the remote control (refer to page 34). When it is closed, the lid is once again secured.

**Indicator lamp**

The indicator lamp is located under the interior rearview mirror.

- ▷ When the indicator lamp flashes continuously: the system is armed.
- ▷ The indicator lamp flashes when it is armed: the door(s), the hood or luggage compartment lid are not completely closed. Even if you do not close the alerted area, the remaining areas are deadlocked, and the indicator lamp flashes continuously after 10 seconds. However, the interior motion sensor is not activated.
- ▷ If the indicator lamp goes out when the system is disarmed: no manipulation or attempted intrusions have been detected in the period since the system was armed.

Alarm system*

- ▷ If the indicator lamp flashes for 10 seconds when the system is disarmed: an attempted entry has been detected in the period since the system was armed.

Following triggering of an alarm, the indicator lamp will flash continuously.

Avoiding unintentional alarms

The tilt alarm sensor and interior motion sensor may be switched off at the same time. You can do this to prevent a false alarm from being triggered (in garages with elevator ramps, for instance), or when the vehicle is transported by trailer or train:

Lock the vehicle twice (= setting the alarm). Press button 2 on the remote control twice in succession or lock the vehicle twice with the key. Refer to page 34.

The indicator lamp lights up briefly and then flashes continuously. The tilt alarm sensor and the interior motion sensor are deactivated as long as the system is armed.

Reset the alarm to reactivate the tilt sensor alarm system and the interior motion sensor.



Interior motion sensor

The transmitter and receiver of the interior motion sensor are located in a trim panel in the vehicle's roof.

In order for the interior motion sensor to function properly, the windows and sliding/tilt sunroof must be completely closed.

However, be sure to deactivate the interior motion sensor (see "Avoiding unintentional alarms") when you wish to leave the windows or sliding/tilt sunroof open.

42 Electric power windows



To open and close windows

From ignition key position 1.

After the ignition has been switched off: You can still operate the electric power windows for up to 15 minutes, as long as no door is opened during that time.

To open:

- ▷ Press the switch up to the resistance point: the window will lower or the rear vent windows will open, as long as you continue pressing the switch.
- ▷ Press the switch past the resistance point: the window moves automatically. Pressing the switch again stops the opening cycle.

To close: you can close the windows in the same manner by pulling the switch. The rear vent window does not close automatically.

The window will not close automatically when the door is open.



Remove the key from the ignition and close the doors when you leave the vehicle so that children cannot operate the power windows and possibly injure themselves. ◀

To use the convenience mode via the door lock or the remote control, refer to page [32](#) or [33](#).


Safety feature

A contact strip is located on the inside upper frame of each of the windows. If pressure is exerted against this contact strip while a window is being raised, the system will respond by stopping the window and then opening it again somewhat.



Despite this safety feature, be extremely careful to ensure that the closing path of the window is not obstructed. Otherwise, an object might not touch the contact strip in some situations (very thin objects, for instance). You can disable this safety feature by pulling the switch beyond the resistance point and holding it. ◀

Sliding/tilt sunroof*

 To prevent injuries, exercise care when closing the sliding/tilt sunroof and keep it in your field of vision until it is shut. Remove the key from the ignition and close the doors when you leave the vehicle so that children cannot operate the sunroof and possibly injure themselves. ◀

A vacuum or a draft in the passenger compartment can be avoided when the roof is opened or raised by keeping the vent outlets on the instrument panel open and possibly increasing the air supply. Refer to page 87.

If the sunroof is completely open, air disturbances may be caused in the vehicle when you are driving at higher speeds. Close the roof as far as necessary until this natural phenomenon ceases.



Lifting – opening – closing


From ignition key position 1.

After turning the ignition off, you can operate the sunroof for up to 15 minutes, as long as no door is opened during that time.

Lifting/opening/closing: press the switch or slide it in the desired direction until you feel resistance.

When the roof is open, tap the switch in the "lifting" direction. The sunroof will then move into the end position for "lifting".

The headliner insert slides back somewhat when you raise the sunroof. When the sunroof is opened the headliner retracts with it.

 Do not close the headliner insert with force when the sunroof is open, otherwise the mechanism will be damaged. ◀

For the convenience operating mode via the door lock or the remote control, refer to page 32.

Automatic opening and closing

Press the switch past the resistance point: the sunroof moves to either the fully-closed or fully-open position.

Tapping the switch again stops the motion immediately.

Safety feature

If the sliding/tilt sunroof encounters resistance at a point roughly past the middle of its travel when it is closing, the closing cycle is interrupted and the sunroof will open again slightly.




Despite this safety feature, be extremely careful to ensure that the closing path of the roof is not obstructed. Otherwise, triggering the closing-force limitation may not be ensured in some situations (with very thin objects, for instance). You can override this safety feature by pressing the switch beyond the resistance point and holding it. ◀

Power loss or malfunction

In the event of an electrical malfunction, the sliding/tilt sunroof can be operated manually. Refer to page [153](#).

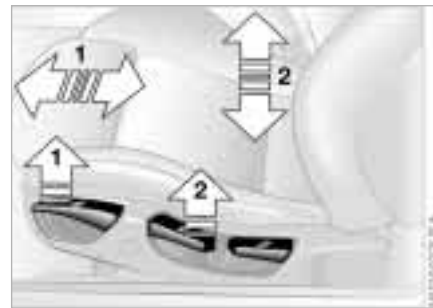
For maximum safety when adjusting the seat position, please observe the following:

 Never try to adjust your seat while operating the vehicle. The seat could respond with unexpected movement, and the ensuing loss of vehicle control could lead to an accident. Be sure that the safety belt remains firmly against your body at all times. In the event of a frontal impact, a loose lap belt could slide over the hips, leading to abdominal injury. In addition, the safety belt's restraint effectiveness is reduced if the belt is worn loosely. Never ride with the backrest reclined to an extreme angle (especially important for the front passenger to remember). If you do so, there is a risk that you will slide under the safety belt in an accident, thus reducing the protection provided by the safety belt. ◀

Correct sitting posture

To reduce strain on your spinal column, sit all the way back in the seat and rest your back fully against the backrest. The ideal sitting posture is achieved with your head extending from your spine in a straight line. For long-distance driving, you may wish to increase the backrest tilt-angle slightly to reduce muscular tension. You should be able to grasp the steering wheel at its highest point with your arms slightly bent.

After a seat adjustment, adjust the height of the safety belt also. Refer to page 55.



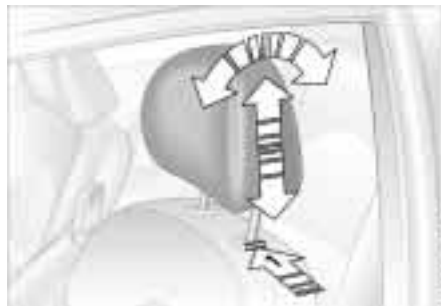
- 1 Longitudinal adjustment
Pull the lever and slide the seat to the desired position.
After releasing the lever, apply pressure to the cushion to ensure that the seat engages securely.
- 2 Cushion height
Pull the lever and apply weight to or remove weight from the seat as required.



3 Backrest angle

Pull the lever and apply weight to or remove weight from the backrest as required.

Head restraints



Adjustments

Height: adjust by pulling up or pushing down.



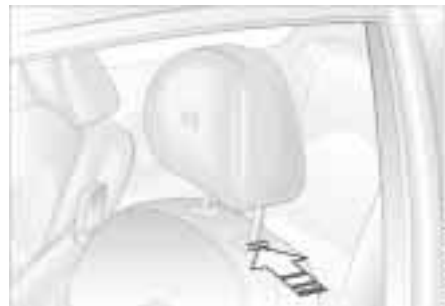
In order to move to the lowest positions, press button 1. ◀

Adjust the angle of the front head restraints: by tilting.



Head restraints reduce the risk of spinal injury in the event of an accident.

Adjust the head restraint so that its center is approximately at the height of your ears. ◀



Removal

- 1 Pull the head restraint upward to the stop
- 2 Press the button (arrow) and remove the head restraint.

Installation

- 1 Press the button (arrow) and insert the head restraint into the guides
- 2 Adjust the head restraint.

Entering the rear



Pull up on the lever and push the backrest toward the front.



Lock both backrests while driving, otherwise there is a danger of an unexpected movement causing an accident. ◀

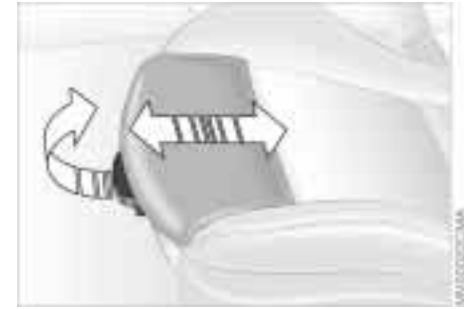
Power seat*



- 1 Tilt angle
- 2 Longitudinal adjustment
- 3 Cushion height
- 4 Backrest angle

The head restraint is adjusted manually.

Seat adjustment



Thigh support

Pull the lever and adjust the position of the cushion for thigh support as desired.

48 Seat adjustment



Lumbar support*

You can adjust the backrest's contour for additional support in the curvature of your spine's lumbar region.

The upper hips and spinal column receive supplementary support to help you maintain a relaxed, upright posture.

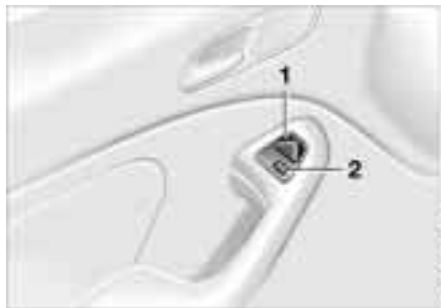
- ▷ Increase/decrease curvature:
Press the front/rear end of the switch
- ▷ Increase the upper/lower curvature:
Press the upper/lower end of the switch.



Adjusting the width of the backrests*

The backrest width can be changed with the sides to adjust the side support to your individual needs.

Decreasing/increasing the width of the backrest: press the front/rear end of the switch.



Exterior mirrors

- 1 Switch for 4-way adjustment
- 2 Selection switch for changing between mirrors

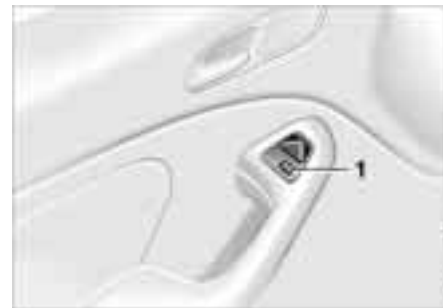
You can also adjust the mirrors manually by pressing against the outer edges of their lenses.



The mirror on the passenger's side features a lens with a more convex surface than the mirror installed on the driver's side. When estimating the distance between yourself and other traffic, bear in mind that the objects reflected in the mirror are closer than they appear. Estimations of the distance to following traffic should therefore not be regarded as precise. ◀

Electric heaters

Both mirrors are automatically defrosted with the ignition key in position 2.



Passenger side exterior mirror tilt function

(automatic curb monitor*)

Move the mirror selector switch 1 to the "driver's mirror" position. When the selector lever is placed in "Reverse," the passenger-side mirror tilts downward. This allows the driver to see the area directly adjacent to the vehicle during parking (curbs, etc.).

You can deactivate this automatic feature by setting the mirror selection switch to the "passenger mirror" position.



For the mirror to function properly, keep the photocells clean and the area between the inside rearview mirror and the windshield free of any obstruction, such as stickers etc.

Interior rearview mirror with automatic dimming feature

By responding to the effects of ambient light and the glare from following traffic, this mirror automatically dims through an infinitely variable range.

The mirror switches to its clear, undimmed mode whenever you shift into reverse.

There are two photocells for automatic dimming. One photocell (arrow) is positioned in the mirror's glass, while the other is slightly offset on the opposite side of the mirror. For further information regarding the mirror's electrochromic technology, refer to page [161](#).



Sun visors

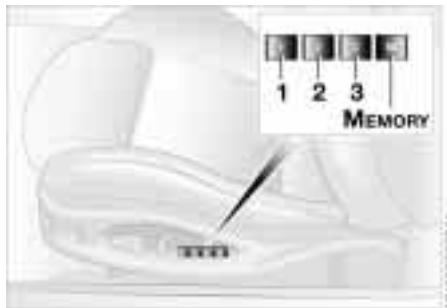
The sun visors can be folded down toward the windshield or swiveled out against the side windows.

Lighted vanity mirror*


Fold down the sun visor and slide the cover panel to the side as required.

The mirror lamps operate from ignition key position 1 on.

Seat and mirror memory



You can store and recall three different driver's seat and outside mirror positions. The illustration shows the buttons located on the side of the seat.

 The memory will not retain the adjustments made to the lumbar supports or the width of the back-rests. ◀


If you press the **MEMORY** button accidentally: press the button again; the indicator lamp goes out.

To store

- 1 Turn the key to ignition key position 1 or 2
- 2 Adjust your seat and outside mirrors to the desired position

- 3 Press the **MEMORY** button: the indicator lamp in the button lights up
- 4 Press memory button 1, 2 or 3, as desired: indicator lamp goes out.

To select a stored setting

 Do not select a memory position while the vehicle is moving. If you do so, there is a risk of accident from unexpected seat movement. ◀

Convenience function:

- 1 The driver's door remains open after unlocking or the ignition key is in position 1
- 2 Briefly press memory button 1, 2 or 3, as desired.

Movement stops immediately when one of the seat-adjustment or memory buttons is activated during the adjustment process.

Security function:

- 1 The driver's door is closed and the ignition key is either removed or in position 0 or 2
- 2 Maintain pressure on the desired memory button 1, 2 or 3, until the adjustment process is completed.




Your car can have your vehicle's systems adjusted in such a manner that your personalized settings are automatically set for the seat and outside mirror positions when you unlock the vehicle with your personal remote control. ◀



If you make use of this method of adjustment, be sure that the footwell behind the driver's seat is unobstructed before unlocking the vehicle. If you fail to do so, any persons or objects behind the seat could be injured or damaged by a rearward movement of the seat. ◀



- 1 Push the locking lever downward
- 2 Adjust the steering wheel (forward/back and up/down) to the desired position
- 3 Pull the lever back in to clamp the steering wheel in the new position.

 Do not adjust the steering wheel while the vehicle is moving, otherwise there is a risk of an accident from unexpected movement. ◀



How the system functions

You have probably frequently wished that you could configure individual functions of your vehicle to reflect your own personal requirements. In developing this vehicle, BMW has "built in" a few options that, should you so desire, your BMW center can adjust for you.

There are settings related to the vehicle ("Car Memory") and settings related to individuals ("Key Memory"). You can have up to four different basic settings adjusted for four different persons. The only requirement is that each person uses his or her own master key with remote control.

When your vehicle is unlocked with the remote control, the vehicle recognizes the individual user by means of a data exchange with the key, and makes adjustments accordingly.

In order for you to distinguish between different keys, colored decals are supplied together with the keys.

What the system can do

Your BMW center can provide you with details on the possibilities that the Car Memory and Key Memory systems offer.

Examples for Car Memory:

- ▷ Various signals that can serve as acknowledgement for locking and unlocking the vehicle, refer to pages [32](#), [33](#)
- ▷ Deactivating/activating the "Follow-Me-Home lamps" function, refer to page [81](#)
- ▷ Activating/deactivating daytime running lamps*, refer to page [81](#)
- ▷ Set the units of measure to indicate outside temperature and distance traveled on the instrument panel, refer to page [19](#).


Car Memory, Key Memory

Examples for Key Memory:

- ▷ Locking your vehicle after starting off, refer to page [36](#)
- ▷ Unlocking and lowering the driver's window at the same time, refer to page [34](#)
- ▷ Automatically moving the seat and outside mirror into position for the respective person when unlocking the vehicle, refer to page [51](#)
- ▷ Calling up customized settings for the automatic climate control when unlocking using the remote control, refer to page [86](#).



You will see this symbol throughout the Owner's Manual. It is to remind you at appropriate places of the settings that are available to you. ◀

 If the safety belt system has been subjected to the stresses involved in an accident or damaged in any other way: have your BMW center replace the entire safety belt mechanism, including the safety belt tensioner and any child restraint systems*. Have them inspect the safety belt anchors, as well. ◀

For care instructions, refer to "Car care" page [131](#).




Drive with your safety belt on

Fasten your safety belt before starting off.

To fasten: make sure you hear the catch engage in the belt buckle.

To release: press the red button in the buckle. Hold the belt and guide it back into its reel.

In the rear, the belt buckle with the word "CENTER" is provided exclusively for the passenger sitting in the middle.

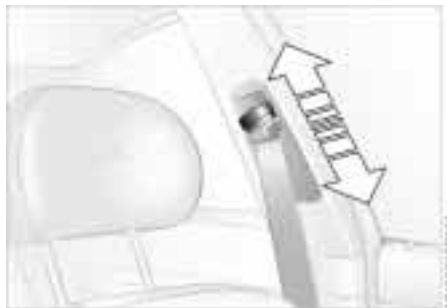
 For your safety, comply with the following instructions for wearing safety belts. If you do not, the safety belts may not be able to provide their maximum protection. The following information also applies to your passengers:

Never allow more than one person to wear a single safety belt. Infants or small children should never be held on the lap of a passenger.

Avoid twisting the belt while routing it firmly across the hips and shoulder, wear it as snugly against your body as possible. Do not allow the belt to rest against hard or fragile objects. Do not route the belt across your neck, or run it across sharp edges. Be sure that the belt does not become caught or jammed.

Avoid wearing bulky clothing and pull on the belt periodically to retension it over your shoulders. In the event of a frontal impact, a loose lap belt could slide over your hips, leading to abdominal injury. In addition, the safety belt's restraint effectiveness is reduced if the belt is worn loosely.

Expectant mothers should always wear their safety belts, taking care to position the lap belt against the lower hips, where it will not exert pressure against the abdominal area. ◀



Safety belt height adjustment

You can adjust the safety belts to fit your own physical dimensions by using the safety belt height adjustment.

Slide the button downward or upward.

For child restraint system installation, refer to page [59](#).

For care instructions, refer to "Car care" page [131](#).



If the safety belt system has been subjected to the stresses involved in an accident or otherwise damaged: have the entire safety belt mechanism replaced by your BMW center, including the safety belt tensioner. In addition, have your BMW center inspect the safety belt anchors. If a child restraint system was in the vehicle during an accident, consult the manufacturer's instructions regarding replacement. ◀

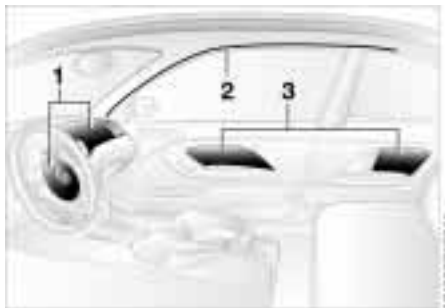
Child restraint systems*



Do not install a rear-facing child restraint system in the front passenger seat of your vehicle. If you do so, the child could be injured in an accident when the airbag is triggered. Always transport children in the rear, securing their restraint systems using the outside safety belts.

Use the middle safety belt only if it is necessary to install three child restraint systems.

Do not modify the child restraint systems in any way, as otherwise, their protective function may be impaired. ◀



- 1 Front airbags on the driver and passenger sides
- 2 Side impact Head Protection System on the driver's side (front)
- 3 Side airbags on the driver and passenger sides (front and rear*)

Protective effect

The front airbags provide additional protection for the front-seat occupants in the event of a severe frontal collision on which the protection afforded by the belts alone may no longer be sufficient. The side impact Head Protection System and the side airbags help provide protection in the event of a collision from the side. Each of the side airbags is designed to help support the occupant's upper body.



▶ The side airbags in the rear passenger area* of your vehicle may already have been deactivated either at the time of manufacture or by a BMW center. You may have them activated if you desire to do so. Please contact your BMW center for additional information. ◀

The illustration schematically depicts the primary directions of vehicle impact that initiate an airbag deployment.

▶ The airbags will not be triggered in the event of a minor accident, a vehicle roll-over or collisions from the rear. ◀

Functional status



The indicator lamp in the instrument cluster shows the airbag system status starting in ignition key position 1.

Indicator lamp displays:

- ▷ The indicator lamp comes on briefly then goes out: system operational
- ▷ The indicator lamp fails to come on: system malfunction
- ▷ The indicator lamp comes on briefly before going out, and then lights up again: system malfunction.

If there is a system malfunction, there is a risk that the airbags will not be triggered within their normal response range, even if the level of impact would normally have triggered them.

Have the system checked by a BMW center immediately.



▶ The airbag indicator lamp also comes on if the safety belt tensioners have been triggered. ◀

Sitting correctly with airbags



Comply with the following instructions for the airbags. If you do not, the airbags may not be able to provide their maximum protection, with resulting risks to personal safety. The following information pertains to all occupants:

Even though there is an airbag, wear a safety belt every time you get in the vehicle, because airbags supplement the safety belts as an additional restraint device.

Assume a sitting posture that is comfortable and allows the greatest possible distance between you and the airbags.

Always hold the steering wheel by the rim to keep any chance of injury to hands or arms to an absolute minimum, should the airbag deploy. Keep the instructions regarding sitting properly in your seat on page 45 in mind as well.

No one and nothing is to come between the airbag and the seat occupant.

Do not use the cover panel above the front passenger-side airbag as a storage area.

Do not apply adhesive materials to the cover panels of the airbags, cover them or modify them in any other way.

Do not use any child restraint systems on the passenger side. Children under 12 years of age, who are smaller than 5 feet (150 cm), may ride in the back only.

If your vehicle is equipped with side airbags in the rear passenger area, be sure that child restraints are mounted correctly and provided with the greatest-possible distance between the airbags in the side trim panels. Do not allow children to lean out of the child's seat in the direction of the side trim panels. If they do so, serious injuries can occur if the airbag is triggered. ◀



At all times, occupants should sit upright and be properly restrained (infants and small children in appropriate child restraint systems; larger children and adults using the safety belts). Never let an occupant's head rest near or on a side airbag because the inflating airbag could cause a serious or fatal injury. Please note that the word "Airbag" imprinted on the door trim panel indicates the airbag's location.

Accident research shows that the safest place for children in an automobile is in the rear seat. However, a child sitting in the rear seat and not properly restrained may place his or her head on or near the airbag, if so equipped. For example, a child – even though belted – may fall asleep with his or her head against the side airbag. It may be difficult for a driver to ensure that children in the rear seat will remain properly positioned at all times and not place their heads on or near the side airbag. Therefore, we recommend that the rear seat side airbags, if so equipped, be deactivated if children will travel in the rear seat.

The rear seat side airbags may already have been deactivated, either at the time of manufacture or by a BMW

58 Airbags

center. Labels in the door opening should indicate the status of your rear seat side airbags. If you are uncertain of their status, or wish to have the airbags activated or deactivated, please contact your BMW center. ◀

Even when all these guidelines are observed, there is still a small residual risk of injuries to the face, hands and arms occurring from airbag deployment in isolated instances. The ignition and inflation noise may cause a mild temporary hearing loss in extremely sensitive individuals.

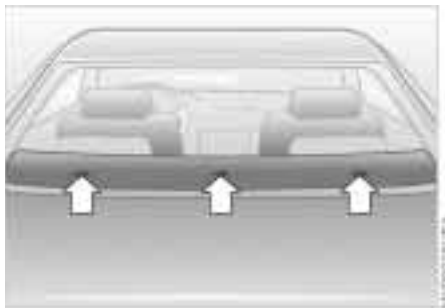
For additional information concerning the airbag system, refer to pages [133](#) and [158](#).



This is the proper way for a child to sit in a child restraint when rear side airbags (arrow) are provided.



This is the right way for a larger child to sit wearing the safety belt when rear side airbags (arrow) are provided.



Commercially available child restraint systems are designed to be secured with a lap belt or with the lap belt portion of a combination lap/shoulder belt. Improperly or inadequately installed restraint systems can increase the risk of injury to children. Always read and follow the instructions that come with the system.

If you use a child restraint system with a tether strap, three additional tether anchorage points have been provided (refer to the arrows in the illustration). Depending on the location selected for seating in the rear passenger area, attach the strap hook to the corresponding anchorage point to secure the child restraint system. Remove the cover first on the middle location.

If the respective seating position is fitted with a headrest, lift the headrest and pass the tether strap between the headrest and the seat back.

Adjust the tether strap according to the child restraint manufacturer's instructions.



Before installing any child restraint device or child seat, please read the following:

Never install a rear-facing child restraint system in the front passenger seat of this vehicle.

Your vehicle is equipped with an airbag supplemental restraint system for the front passenger. Because the backrest on any rear-facing child restraint system (of the kind designed for infants under 1 year and 20 lbs/kg) would be within the airbag's deployment range, you should never mount such a device in the front passenger seat, since the impact of the airbag against the child restraint's backrest could lead to serious or fatal injuries.

If it is necessary for a child (not an infant) to ride in the front seat, certain precautions should be taken. First, move the passenger seat as far away from the instrument panel as possible. This important precaution is intended to

maximize the distance between the airbag and the child. Older children should be tightly secured with the safety belt. Younger children should be secured in an appropriate forward-facing child restraint system that has first been properly secured with a safety belt. Never install a rear-facing child restraint system in the front passenger seat. We strongly urge you to carefully read and comply with the instructions for installation and use provided by the child restraint's manufacturer whenever you use such a device.

Be sure that all occupants (of all ages) remain properly and securely restrained at all times. ◀

All rear seating positions in your vehicle meet the recommendations of SAE J1819, an industry recommended practice for securing child restraint systems in motor vehicles.

60 Transporting children safely



LATCH attachment of the child seat*

Remove the cover cap on the outer mount by pulling it toward the front. When reattaching it, make sure that the recess points upward.



The illustration shows the mounts for a LATCH child-restraint system on the left rear seat.



To attach the LATCH child-restraint system, please follow the manufacturer's operating and safety precautions. ◀



Child seat security

All of the rear belt retractors and the front passenger's safety belt can be locked for mounting and securing child restraint systems.

A label with the appropriate instructions for this is located in the immediate vicinity of the buckle latch of each safety belt.

To lock the belt

Extract the entire length of the belt from the inertia reel mechanism. Allow the reel to retract the belt somewhat and engage the buckle, then tighten the belt against the child restraint system. The retraction mechanism is now locked. The belt cannot be extracted further. Always comply with the installation instructions provided by the manufacturer of the child restraint system.

To release the belt

Release the safety belt, remove the child's seat and retract the safety belt to its end position on the belt retractor.



- 0 Steering locked
- 1 Steering unlocked
- 2 Ignition switched on
- 3 Starting the engine

Steering locked

The key can be inserted or removed in this position only.

To lock the steering column after you have removed the key, turn the steering wheel until you hear it lock.

If the key is not removed, an acoustic signal sounds after the driver's door has been opened.

Steering unlocked

Individual electrical accessories are ready for operation.

You will find that it is often easier to turn the ignition key from position 0 to position 1 when you move the steering wheel slightly to help disengage the lock.

Ignition switched on

All electrical equipment and accessories are available for use.

Starting the engine

- 1 Engage the parking brake
- 2 Put manual-shift gear lever in idling position
- 3 Step on the clutch pedal
- 4 Turn the key to position 3 to start the engine.

Do not actuate the starter for too short a time. Do not turn it for more than approx. 20 seconds. Release the ignition key immediately when the engine starts.



Do not allow the engine to run in enclosed spaces. The exhaust gases contain carbon monoxide, an odorless and colorless, but highly toxic gas. Breathing the exhaust gases poses an extreme health risk, and can lead to unconsciousness and death.

Do not leave the vehicle unattended with the engine running. An unattended vehicle with a running engine represents a potential safety hazard. ◀



Do not allow the engine to warm up by leaving it running while the vehicle remains stationary. Instead, begin driving immediately at a moderate engine speed. ◀

Starting the engine

If the engine does not start on the first attempt (if the engine is very hot or cold, for instance):

- ▷ Press the accelerator pedal halfway down while engaging the starter.

Cold starts at very low temperatures, starting at about +5 °F (-15 °C) and at high altitudes over 3,300 ft (1,000 meters):

- ▷ On the first start attempt, engage the starter for a longer period (approx. 10 seconds)
- ▷ Press the accelerator pedal halfway down while engaging the starter.

Engine idle speed is controlled by the engine computer system. Increased speeds at startup are normal and should decrease as the engine warms up. If engine speed does not decrease, service is required.

To prevent the battery from discharging, always deactivate electrical devices that are not in use. Switch the ignition off when the vehicle is not being driven.

Switching off engine

Turn the ignition key to position 1 or 0.



Do not remove the ignition key while the vehicle is still moving. If you do so, the steering will lock, making it impossible to steer the vehicle. When you leave the vehicle, always remove the ignition key and engage the steering lock.

Set the parking brake when parking on steep hills, because under certain conditions, putting the vehicle into first gear or reverse may not be enough to prevent it from rolling away. The power assist is not available when the engine is not on. This means that more effort is required to apply the brakes. ◀

Parking brake



The parking brake is primarily designed to prevent the vehicle from rolling while parked. It operates against the rear wheels.

To engage

The lever engages automatically, the indicator lamp in the instrument panel comes on when the ignition key is in position 2. Refer to page [21](#).

To release

Pull up slightly on the lever, press the button (arrow) and lower the lever.



If, in exceptional circumstances, it should be necessary to engage the parking brake while the vehicle is in motion, do not pull the lever with excessive pressure. Keep your thumb pressed against the release button while carefully pulling the lever up to apply moderate pressure. Excessive pressure can lead to over-braking and loss of traction (fishtailing) at the rear axle.

The brake lamps do not come on when the parking brake is engaged.

Set the parking brake when parking on steep hills, because under certain conditions, putting the vehicle into first gear or reverse may not be enough to prevent it from rolling away. ◀

To avoid corrosion and one-sided braking, apply the parking brake lightly from time to time when coasting to a standstill (at a traffic signal, for instance), provided that it is safe to do so.

Manual transmission



The shift lever's neutral plane is located between 3rd and 4th gear.

When shifting from each gear into "Neutral," the shift lever automatically springs back to the gear lever's home position.



When shifting gears in the 5th/6th-gear plane, be sure to press the gear lever to the right in order to prevent inadvertent selection of a gear in the 3rd/4th-gear plane. Do not hold the vehicle in place on slopes by slipping or "riding" the clutch. Use the parking brake instead. Riding the clutch causes the clutch assembly to wear out sooner. ◀

Reverse

Select only when the vehicle is stationary. Press the shift lever to the left to overcome the resistance.

As you do this, the backup lamps will turn on automatically when the ignition key is in position 2.



- 1 High beam (blue indicator lamp)
- 2 Headlamp flasher (blue indicator lamp)
- 3 Turn signal indicator (green indicator accompanied by periodic clicking sound from the relay)

To signal briefly

Press the lever up to but not beyond the detent. It then returns to the center position when released.



If the flashing indicator lamp and the clicking from the relay are both faster than normal, one of the turn signal indicators has failed. ◀



- 0 Wipers retracted
- 1 Intermittent mode or rain sensor
- 2 Normal wiper speed
- 3 Fast wiper speed
- 4 Brief wipe
- 5 Rotary dial for control of the wipe interval or the sensitivity of the rain sensor

Intermittent mode

(not on vehicles with rain sensor)

You can set the wipe interval at four stages with rotary dial 5. In addition, the wipe interval is varied automatically depending on road speed.

Rain sensor*

When the rain sensor is activated, the windshield wiper is controlled automatically, depending on the degree of wetness of the windshield (in both snow and rain). You do not have to be concerned with switching the windshield wiper on or off or adjusting the wipe interval between intermittent and full wipe. Instead, you can concentrate fully on the traffic conditions. This is especially important under adverse weather conditions.

The rain sensor is positioned on the windshield, directly ahead of the interior rearview mirror.

To activate the rain sensor:

- ▷ From ignition key position 1, move the lever to position 1. The wipers travel once across the windshield, regardless of the weather.
- ▷ You can leave the lever permanently in position 1. It is then only necessary to activate the rain sensor from ignition key position 1. To do this
 - ▷ give rotary dial 5 a quick turn or
 - ▷ clean the windshield 5, refer to page 66.

To adjust the sensitivity of the rain sensor: turn rotary dial 5.

Deactivating the rain sensor: put lever in position 0.



Deactivate the rain sensor when passing through an automatic car wash. Failure to do so could result in damage caused by undesired wiper activation. ◀

Normal wiper speed

When the vehicle is stationary, the wipers switch automatically to intermittent wipe (not on vehicles with rain sensor).

Fast wiper speed

When the vehicle is stationary, the wipers operate at normal speed (not on vehicles with rain sensor).



0 Wipers retracted

1 Clean the windshield

Clean the windshield

The system sprays washer fluid onto the windshield and activates the wipers for a brief period.

If you only pull the lever briefly, the system sprays washer fluid onto the windshield without activating the wipers.



Do not use the washers if there is any danger that the fluid will freeze on the windshield. If you do so, your vision could be obscured. For this reason, use an antifreeze agent. Refer to page 122.

Washer/Wiper system

Do not use the washers when the reservoir is empty, since this could cause damage to the washer pump. ◀

Clean the headlamps*

When the vehicle's lighting system is switched on, the headlamps will also be cleaned every fifth time the automatic windshield washer is activated.

Windshield washer jets

The windshield washer jets are warmed automatically when the ignition key is in position 2.

Rear window defroster



To activate

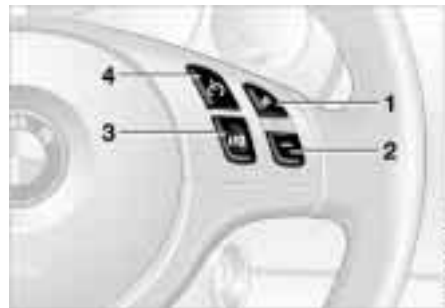
Press the button: as long as the indicator lamp remains on, the rear window defroster continues at high output (rapid thaw).

After the indicator lamp goes out, the defroster continues operating at reduced power for a limited period before deactivating automatically.

To deactivate

If the indicator lamp is still on, press the button.

Cruise control



Starting at about 20 mph (30 km/h), you can maintain and store any vehicle speed that you specify.

You can use cruise control whenever the system is active while the engine is running.

- 1 Accelerate and store
- 2 Decelerate and store
- 3 Activate/interrupt/deactivate the system
- 4 Recall the stored speed.

To activate the system

From ignition key position 2.

Press switch 3 and the indicator lamp in the instrument cluster (refer to page 22) will come on. You can now use the cruise control.



Do not use cruise control on winding roads, when high traffic density prevents driving at a constant speed, when the road surface is slick (snow, rain, ice), or when the road surface is loose (rocks, sand). ◀

To deactivate the system

Press switch 3 repeatedly until the indicator lamp in the instrument cluster goes out.

The cruise control is also deactivated when the ignition key is in position 0.

The speed stored in the memory is deleted.

To store and maintain speed as well as to accelerate

Press button 1 briefly:

The system registers and maintains the current vehicle speed. Each additional tap on the button increases the speed by approx. 0.6 mph (1 km/h).

Press and hold button 1:

The vehicle accelerates without pressure on the accelerator pedal. When you release the button, the system records and maintains the current speed.



If, on a downhill gradient, the engine braking effect is not sufficient, the controlled speed can be exceeded. Speed can drop on uphill grades if the engine output is insufficient. ◀

To decelerate

Press button 2 briefly:

Whenever cruise control is active, your speed will reduce by approx. 0.6 mph (1 km/h) each time you tap the button.

Press and hold button 2:

With the cruise control active, the system automatically reduces the throttle opening to slow the vehicle. When you release the button, the system records and maintains the current speed.

To cancel the cruise control

When the cruise control is on, press and hold button 3. The indicator lamp will stay on.

You can use the cruise control again whenever required by calling up the speed that was stored last.

In addition, the cruise control is canceled automatically:

▷ If the brakes are applied

- ▷ When pressing down the clutch pedal
- ▷ If the cruise speed is either exceeded or not met for an extended length of time (if you depress the accelerator pedal and exceed the set speed, for example).

Recal the stored speed

Press button 4:

The vehicle accelerates to and maintains the last speed stored.



- 1 Odometer
- 2 Trip odometer

Odometer

You can activate the displays shown in the illustration with the ignition key in position 0 by pressing the button in the instrument cluster (arrow).

Trip odometer

To reset the trip odometer to zero, press the button (arrow) with the ignition key in position 1 or higher.



Variable pre-warning zone

The orange pre-warning zone displays current permissible engine speeds, depending on the engine temperature. As the engine temperature climbs, some of the sectors of this pre-warning zone will go out one after the other.

Avoid engine speeds in the early warning zone if possible.

Warning zone



Be sure to avoid engine speeds in the red warning zone, as otherwise, the engine can be damaged. ◀

In this range the fuel supply will be interrupted to protect the engine; the resulting effect resembles that associated with a sudden loss of power.



The general operating temperature is between 175 °F (80 °C) and 250 °F (120 °C). During performance-oriented driving, do not exceed the maximum temperature of 300 °F (150 °C).



Once the indicator lamp stays on continuously, there are still approx. 2 gallons (8 liters) of fuel in the fuel tank.

For fuel tank capacity, refer to page [169](#).

If the tilt of the vehicle varies (when you are driving in mountainous areas, for example), the needle may fluctuate slightly.



Please refuel early, since driving to the last drop of fuel can result in damage to the engine and/or catalytic converter. ◀

When the ignition is turned on, the indicator lamp in the fuel display will light up briefly as a functional check.



Between the blue and red zones

Normal operating range. It is not unusual for the needle to rise as far as the edge of the red zone in response to high outside temperatures or severe operating conditions.

Blue

The engine is still cold. Drive at moderate engine and vehicle speeds.

Red

To check the function, the warning lamp in the coolant temperature gauge will light up briefly when the ignition is turned on.

If the lamp comes on while operating the vehicle, the engine has overheated. Switch the engine off immediately and allow it to cool down.

Checking coolant level, refer to page [125](#).



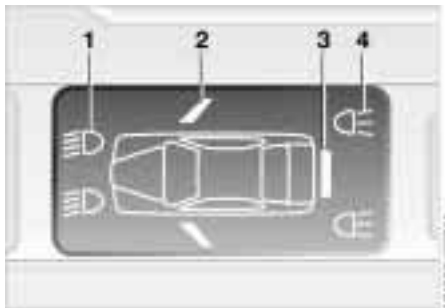
Remaining distance for service

The displays shown in the illustration appear for a few seconds when the ignition key is in position 1 or after the engine is started.

The next service due appears with the message OILSERVICE or INSPECTION, together with the distance remaining before the next scheduled service.

The computer bases its calculations of the remaining distance on the previous driving style.

A flashing message and a "-" in front of the number mean that the service interval has already been exceeded by the distance shown on the display. Please contact your BMW center for an appointment.



Display

The following information or conditions are displayed from ignition key position 2 until the cause has been corrected:

- 1 Inspect the low beam and high beam headlamps, as well as the side lamps
- 2 Door open
- 3 Luggage compartment lid open
- 4 Check brake and tail lamps.

After completion of a trip and upon opening the driver's door, an acoustic signal will sound yet not be displayed, if the low beam headlamps have not been turned off.

Computer



Mode selection

With the ignition key in position 1 and higher, you can use the button in the turn signal lever to retrieve information from the computer for display in the instrument cluster. By pressing the button briefly in the direction of the steering column, you can call up a new function for display.

The displays appear in the following order:

Time of day, outside temperature, average fuel consumption, cruising range, average vehicle speed.

Starting with ignition key position 1, the last active setting is displayed.

Clock

If you wish to have a permanent time display, you can make this adjustment in the radio display (refer to the Radio Owner's Manual).

You can set the time of day, including for the car radio display, as follows.



Adjustments

From ignition key position 1:

To set ahead: turn the button to the right.

To set back: turn the button to the left. The adjustment speed will increase the longer you continue to hold the button.

To change the display mode: press the knob briefly. Every time you press the knob, the clock display alternates between the 12-hour or 24-hour mode.

In ignition key position 0: the time is displayed for a few seconds after you press the left button (refer to "Odometer", page 69).



Outside temperature

You can change the units of measure (°C/°F) for the outside temperature display by pressing the right-hand reset button in the instrument cluster while the temperature display is active.

Ice warning

If the outside temperature drops to about 37.5 °F (+3 °C), then the computer will automatically switch to show the outside temperature. In addition, a signal sounds as a warning and the display flashes for a brief period.

This warning will repeat itself whenever the temperature has reached at least 43 °F (+6 °C) since the last warning, and has then dropped further to 37.5 °F (+3 °C).



Ice warnings do not exclude the possibility that surface ice can still occur at temperatures above 37.5 °F (+3 °C), e.g. on bridges and shady roads. ◀



Average fuel consumption

If you continue to hold the button on the turn signal lever, the average fuel consumption last displayed is recalculated from that point.



Cruising range

The computer bases its calculations of the cruising range on the previous driving style.



Average speed

If you continue to hold the button on the turn signal lever, the average fuel consumption last displayed for that speed is recalculated from that point in time.

Any time spent when the vehicle is stationary and the engine is shut off is ignored for the calculation.

The concept

The PDC assists you when you back into a parking space. A signal warns you of the distance to an obstacle. To do this, four ultrasonic sensors in the rear bumper measure the distance to the nearest object. The range for the sensors located at both rear corners ends approx. 2 ft (60 cm) behind the bumpers. The range for the two middle sensors is slightly less than 4.9 ft (1.50 meters).

The system is activated automatically about one second after you engage reverse with the ignition key in position 2. PDC is deactivated when you shift back out of reverse.

Acoustic signals

The distance to the nearest object is indicated by a tone sounding at various intervals. As the distance between vehicle and object decreases, the intervals between the tones become shorter. A continuous tone indicates the presence of an object less than 1 ft. (30 cm) away.

The warning signal is canceled after approx. three seconds if the distance to the obstacle remains constant during this time (if you are moving parallel to a wall, for instance).

System malfunctions will be indicated by a continuous high-pitched tone when the system is activated the first time. Please have your BMW center resolve the problem.



The PDC does not remove the driver's personal responsibility for evaluating the distance between the vehicle and any obstacles. Even when sensors are involved, there is a blind spot in which objects cannot be detected. This applies especially in those cases where the system approaches the physical limits of ultrasonic measurement, as occurs with tow bars and trailer couplings, and in the vicinity of thin and painted objects. Certain sources of sound, such as a loud radio, could drown the PDC signal tone. ◀



Keep the sensors clean and free of ice or snow in order to ensure that they continue to operate effectively.

Do not apply high pressure spray to the sensors for a prolonged period of time. Always maintain a distance of more than 4 in (10 cm). ◀

The concept

DSC maintains vehicle stability, even in critical driving situations.

The system optimizes vehicle stability during acceleration and when starting from a full stop, as well as optimizing traction. In addition, it also recognizes unstable driving conditions such as understeering or oversteering in curves, and helps the vehicle remain on a steady course by using the engine and brake system to intervene at the different wheels. This, of course, is true only within physically feasible limits.

The DSC is operational every time you start the engine.



The laws of physics cannot be repealed, even with DSC. It will always be the driver's responsibility to drive in a manner that matches road conditions. We therefore urge you to avoid using the additional safety margin of the system as an excuse for taking risks.

Do not make any modifications to the DSC system. Allow only authorized technicians to perform service procedures on the DSC. ◀

At first, you may need some time to become accustomed to this system's intervention. However, it guarantees optimum drive force and at the same time, the best possible vehicle stability.

For additional details concerning DSC, refer to the chapter "Advanced technology" on page 158.

Indicator lamp



The indicator lamp in the instrument cluster will go out shortly after the ignition has been switched on. Refer to pages 21, 22.

- ▷ Indicator lamp flashes: the DSC is active and is controlling the drive torque based on driving conditions
- ▷ If the indicator lamp fails to go out after the engine has been started, or if it comes on during normal driving and stays on: the DSC has been switched off via the button or there is a malfunction. You can continue to drive the vehicle normally, but without DSC. Please consult your BMW center for repairs.



Reactivating the DSC

Press the button again; the indicator lamp goes out.

Deactivating the DSC

Press the DSC button briefly; the indicator lamp will light up and stay on.

When the DSC is deactivated, you are operating the vehicle in the conventional drive mode.

We recommend that you switch the DSC off for increased traction:

- ▷ When rocking the vehicle or starting off in deep snow or on loose surfaces
 - ▷ When driving with snow chains.
- Refer also to page [108](#).



To maintain vehicle stability, always drive with the DSC switched on whenever possible. ◀

78 Tire Pressure Warning (RDW)

The concept

The Tire Pressure Warning (RDW) monitors the tire pressure in all four wheels while driving. The system detects whenever the inflation pressure in a tire drops significantly.

Controlling the tire pressure is based on monitoring the speed of the tires relative to each other. A flat tire is detected and reported because the speed suddenly deviate drastically from one another.



Initializing the system

Initializing is necessary to familiarize the system with the correct inflation pressure.

Repeat this process after any changes in tire inflation pressure, tire rotation or replacement. Do not carry out further system initialization after correcting the inflation pressure and letting the system "learn" what condition is required.

- 1 Check the tire inflation pressure in all the tires, comparing them with the inflation pressure table (page 27), and adjusting their pressure if necessary
- 2 Turn the ignition key to position 2
- 3 Continue to press the button until the yellow indicator lamp in the instrument cluster lights up. After a short

time, the indicator lamp will go out automatically

- 4 After a few minutes, the RDW will accept the current inflation pressure as the value to be measured against, and from that point on, can detect and report a flat tire.



Activating/deactivating the system

The system is automatically active in ignition key position 2 and is therefore always on during driving.

To deactivate the system: tap the button, the indicator lamp will light up yellow.

To activate the system: tap the button again, the indicator lamp goes out.

Deactivate the system while driving with snow chains, since false warnings and undetected losses in pressure are possible under these kinds of conditions.

Flat tire



The indicator lamp in the instrument cluster will light up red in the event of tire pressure loss.

In addition, an acoustic signal is sounded. To come to an immediate stop, reduce speed, while avoiding any sudden, jerky braking or steering maneuvers.

Fix the flat tire using the M Mobility system (refer to page 145).

Reset the indicator lamp: the red indicator lamp must be switched off manually after mounting a new wheel. At this point, hold the RDW switch down until the indicator lamp goes out. Reinitialize the system afterward.



The RDW cannot alert you to severe and sudden tire damage caused by external factors. The RDW will not identify the natural loss of pressure in all four tires, either. ◀



Check the tire inflation pressure on a regular basis and correct if necessary. Refer to page 26.

Under certain circumstances, there may be false warnings or a delayed detection of pressure losses when driving on snow-covered or slippery road surfaces.

A sporty driving style (slip at the wheels receiving the torque, high lateral acceleration) can lead to delayed RDW warnings. ◀

System malfunction

As long as there is still a malfunction, the indicator lamp in the instrument cluster will stay lit up yellow.

Please contact your BMW center for additional information.



The system (sport-mode identification) will cause the engine to respond more spontaneously to the motion of the accelerator pedal.

Activating/deactivate sport-mode identification

Activating: with the key in ignition key position 2, press the Sport button; the indicator lamp will light up.

Deactivating: press the Sport button again; the indicator lamp will go out.

The sport-mode is deactivated every time the engine is started.

Side lamps/Low beams



Side lamps



With the switch in this position, the front, rear and side vehicle lighting comes on. You can use the side marker lamps for parking. Refer to page 82 for one-sided lighting as an additional possibility for parking.

Low beam headlights



When you switch the ignition off with the low beam headlights on, only the side lamps will remain on.



"Follow-Me-Home" lamps:
If you activate the headlamp flasher after you have parked the vehicle, the low beam lamps will remain on for a short period of time. You may also have this function deactivated if you wish. ◀

"LIGHTS ON" warning

Whenever you open the driver's door, after having turned the ignition key to position 0, you will hear a buzzing sound for a few seconds to remind you that the lamps have not been switched off.

Daytime running lamps*

If you desire, the lamp switch can be left in the second position. When the ignition is switched off, the external lighting is also switched off.

Instrument lighting



Turn the rotary dial to control the lighting when the side or low beam lamps are on.



- 1 High beams (blue indicator lamp)
- 2 Headlamp flasher (blue indicator lamp)
- 3 Parking lamps

Parking lamp, left or right

As an additional feature, you can illuminate your vehicle on either side for parking, if you wish to do so:

With the ignition key in position 0, engage the lever in the appropriate turn signal position.



Front fog lamps



A green indicator lamp appears in the instrument cluster to indicate that the front fog lamps are on.



The interior lamps operate automatically.

Switching the interior lamps on and off

Press the button briefly.

If you want the interior lamps to remain off all the times, press and hold the button for approx. 3 seconds.

Press the button briefly to revert to normal operation.

Footwell lamps

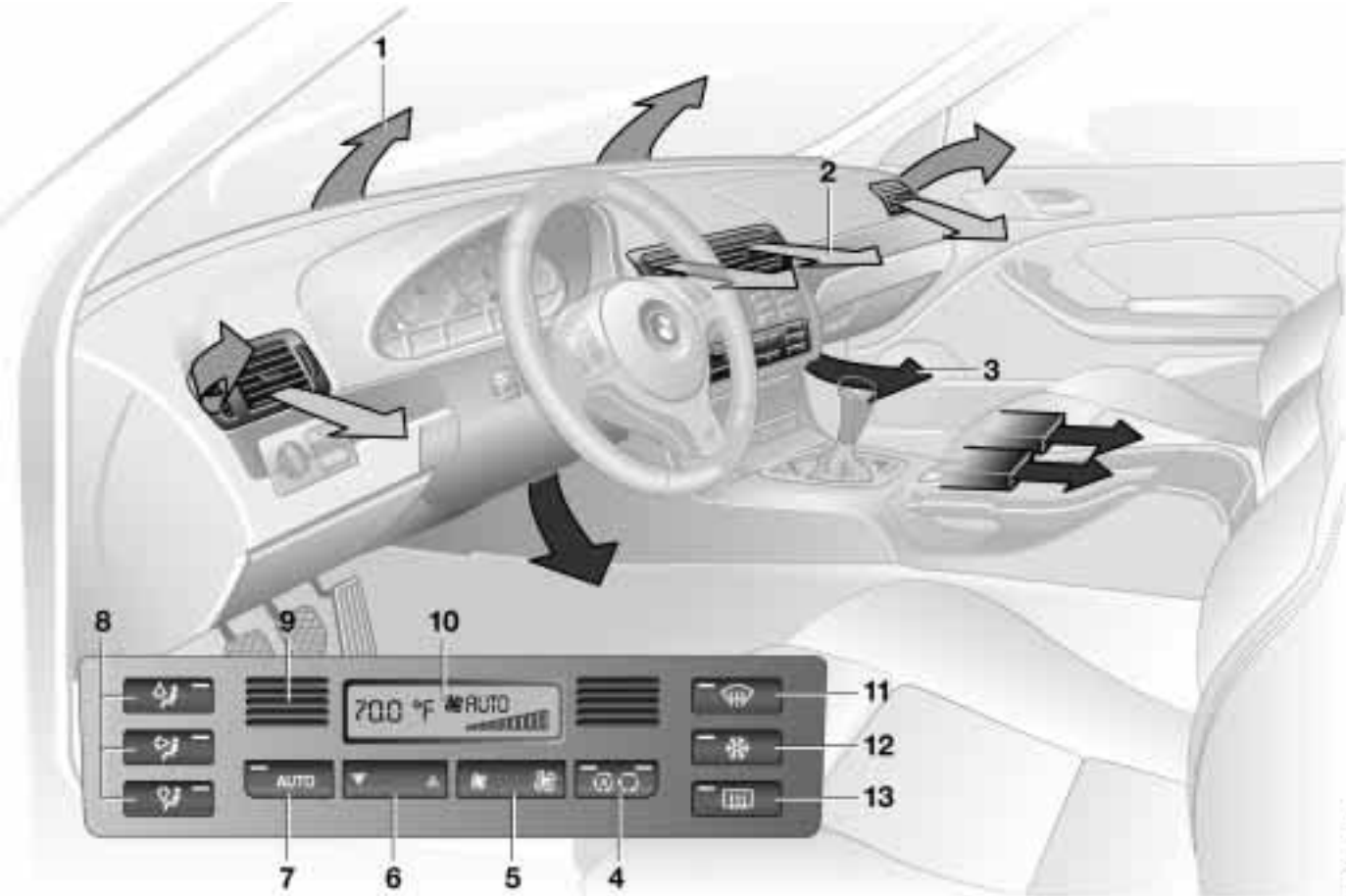
The footwell lamps operate in the same way as the interior lamps.



The reading lamps are located in the front near the interior lamp and in the rear (illustration). They can be switched on and off with the button adjacent to each lamp.



To keep the battery from discharging, all of the lamps in the vehicle are switched off automatically approx. 15 minutes after the ignition key has been turned to position 0. ◀



Automatic climate control


- 1 Air onto the windshield and onto the side windows
- 2 Airflow toward the upper body
The side rotary dials allow you to open and close the air supply through an infinitely-variable range, while the levers change the airflow direction. The center rotary dial adjusts the temperature of the air as it flows out, see page [88](#)
- 3 Ventilation for the front footwell
There are corresponding air vents in the rear footwell as well
- 4 Recirculated air mode/Automatic recirculated air control (AUC) [87](#)
- 5 Air supply (fan) [87](#)
- 6 Temperature [86](#)
- 7 Automatic air distribution [86](#)
- 8 Individual air distribution [86](#)
- 9 Air grill for interior temperature sensor – please keep clear and unobstructed
- 10 Display for temperature and air supply [86](#)
- 11 To defrost windshield and side windows [87](#)
- 12 Air conditioner [87](#)
- 13 Rear window defroster [67](#), [88](#)

Tips for pleasant driving

Use the automatic system (switch on AUTO – button 7).

- ▷ Select an interior temperature that is comfortable for you, e.g. 72 °F (+22 °C)
- ▷ Whenever the outside temperature is above 41 °F (+5 °C), you can also use the air conditioner 12. This will dry the air as well as preventing condensation on the window surfaces – if there are passengers with damp clothing, for example
- ▷ Set the outlets 2 so that the air flows past you and is not directed straight at you
- ▷ Set the rotary dial between the air outlets 2 for the upper body to a medium position, since air that is somewhat cooler promotes driving without fatigue.

Detailed setting options are described for you in the following sections.

 Your vehicle is set in such a manner that, when you unlock the vehicle with your individualized remote control, your own personalized setting for the automatic climate control is initiated. ◀


Automatic air distribution



The automatic program will take over

- ▷ automatically distributing the air supply to the vents, as well as
- ▷ automatically adjusting the amount of incoming air.




It will adapt to the settings you have made for the temperature desired in the passenger compartment – taking outside influences into account (summer, winter) – and will provide you with a comfortable climate in the vehicle at any time of the year.

- ▷ Select an interior temperature that is comfortable for you e.g. 72 °F (+22 °C). The temperature selected and  AUTO for air supply will appear in the display 10. Refer to the overview on page 84
- ▷ Open up the vents for the upper body
- ▷ Switch on the air conditioner in warm weather. The maximum cooling capacity is achieved when you set rotary dial 3 (refer to page 88) to cold.

Individual air distribution



You can cancel the AUTO program by selecting specific distribution patterns to suit your own individual requirements.

You can direct air to flow onto the windows , toward the upper body  and into the footwell .

Temperature



The figures in the display provide a general indication of interior temperature. We recommend 72 °F (+22 °C) as a comfortable setting, even if the air conditioner is on. When you start the vehicle, the system ensures that the selected temperature is reached as quickly as possible. It then maintains this temperature, regardless of the season.

Set rotary dial 3 (refer to "Draft-free ventilation" on page 88) to a medium setting, since air that is somewhat cooler promotes driving without fatigue. You can use this setting for mixing air to make minor comfort modifications.



You can set uncontrolled heater output up to 90 °F (+32 °C). The air conditioner is at full cooling output at 60 °F (+16 °C). ◀

Automatic climate control

Air supply (fan)



By pressing the left or right half of the button, you can vary the air supply. By doing this, you switch off the automatic control of the air supply. Nevertheless, the automatic air distribution remains unchanged.

When you set the lowest blower speed by pressing the left half of the button, all of the displays are canceled: the blower, heating and air conditioner are switched off, and the air supply is stopped. You can reactivate the system by pressing any button for the automatic climate control.

Defrosting the windshield and removing condensation from the windows



This program quickly removes ice and condensation from the windshield and side windows.

Air conditioner



The air is cooled and dehumidified and – depending on the temperature setting – rewarmed when the air conditioner system is switched on.

Depending on the weather, the windshield may fog over briefly when the engine is started.

Use the button to switch the air conditioner off at outside temperatures below approx. 41 °F (+5 °C). This will prevent the windows from fogging over. If the windows fog over after switching the air conditioner off, switch it back on.



Condensation forms in the air conditioner system during operation, that then exits under the vehicle. Traces of condensed water of this kind are thus normal. ◀

Automatic recirculated air control (AUC)



If there are unpleasant odors or pollutants in the outside air, you can temporarily block the airflow from the outside. The system then recirculates the air already within the vehicle.

By repeatedly pressing the button, you can select one of three different operation modes.

- ▷ Indicator lamps off: outside air always flowing into the vehicle
- ▷ Left-hand indicator lamp on – Automatic mode: the system detects pollutants in the outside air and responds by deactivating the outside airflow as required. The system then recirculates the air already within the vehicle. Depending on air quality requirements, the system automatically switches between outside air supply and recirculation of the air already within the vehicle
- ▷ Right-hand indicator lamp on: the flow of outside air is permanently blocked. The system recirculates the air already within the vehicle.

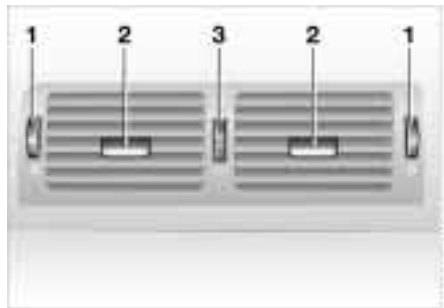


If the windows fog over in the recirculated air mode, switch the recirculated air off and increase the air supply as required. ◀

Rear window defroster



When the rear window defroster is activated, the indicator lamp comes on. The rear window defroster switches off automatically. Refer to page [67](#).



Draft-free ventilation

You can adjust the vents for the upper body area to select the optimum airflow rates and directions for your personal requirements:

- 1 Rotary dials for opening and closing the vents at any setting desired
- 2 Lever for changing the direction of the airflow.
Set the vents so that the air flows past you and is not directed straight at you.
- 3 Using the rotary dial, you can mix more or less cool air with the air coming out of the vents aimed at the upper body.

Microfilter/Activated-charcoal filter

The built-in microfilter removes dust and pollen from the incoming air. The activated-charcoal filter provides additional protection by filtering gaseous pollutants from the outside air. Your BMW center will replace the combined filter as a standard part of your scheduled maintenance. A substantial reduction in airflow indicates that the filter needs to be replaced early.

For additional details on changing the filter, refer to page [152](#).

Heated seats*



The seat cushion and backrest can be heated with the ignition key in position 2.

Heating levels

You can call up different heating levels by repeatedly pressing the buttons.

When the three indicator lamps are illuminated, the highest heating mode is activated. One lamp indicates the lowest heating mode. The temperature is regulated with a thermostat in each mode.

To deactivate

Press repeatedly or hold down, until all of the indicator lamps go out.

Roller sun blind*




To actuate, press the button briefly with the ignition key in position 1.



HiFi system – harman kardon

When the system is activated, the impression of a significantly larger passenger compartment is created in all seats, together with an improvement of the stereo effect.

 When radio reception is weak, the system will frequently switch back and forth between stereo and mono mode. If this happens, turn the HiFi system off. ◀

Glove compartment



Opening and closing

To open: pull the handle. The glove compartment lamp will light up.

To close: fold up cover.



To prevent injury in the event of a crash, close the glove compartment immediately after use. ◀

To lock

Use one of the master keys to lock the vehicle. A master key can also be used for unlocking.



If, for example, you turn over only your door key for valet parking, (refer to page 30), access to the glove compartment is not possible. ◀

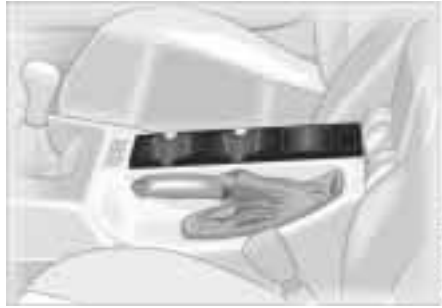


Front center armrest*

To open: press the button (arrow) and lift upward.

Other compartments and nets

You will find additional storage areas in the doors and in the center console above the ashtray. Storage nets are located on the backrests of the front seats.



Beverage holder, coin box

A coin box and two beverage holders are provided in the center console.



Rear center armrest*

You will find a beverage holder (for two drink containers) and a garbage bag holder in the rear center armrest.

Opening the beverage holder: press (arrow).

92 Storage compartments



Storage package*

For your convenience, there are:

- ▷ Two flip-out sockets on the rear center console (arrows)
- ▷ An eyeglass storage compartment* in the front center console above the ashtray.

Cellular phone*



Hands-free system

In vehicles with telephone preparation* or a communications package*, the trim piece for the hands-free microphone is located in the headliner near the interior lamp.

For further information on the cellular phone, refer to the separate Owner's Manual.

Ashtray, front



To open

Press briefly in direction indicated by arrow.



To empty


Press on the edge of the open cover (arrow): you can now pull the ashtray upward for removal.

Extinguishing cigarettes

Tap off the ash and gently press the tip into the funnel.



Press the lighter in. Remove as soon as the lighter jumps back out.

 Hold or touch the hot cigarette lighter by the knob only. Holding or touching it in other areas could result in burns. The cigarette lighter remains operational when the ignition key has been removed. For this reason, children should never be left in the vehicle unattended. ◀

Cigarette lighter socket

It can be used for attaching power supplies for flashlights, car vacuum cleaners and other similar appliances up to a rating of approx. 200 watts at 12 volts. Avoid damaging the socket due to inserting plugs of different shapes or sizes.



To open

Push the cover open.

To empty

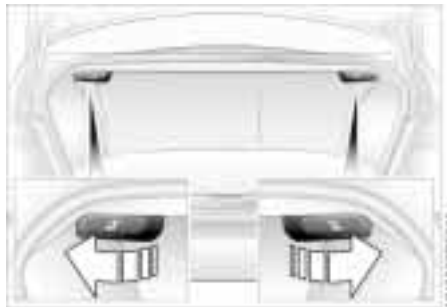
Press on the edge of the raised cover in the opening direction (arrow). You can now pull the ashtray upward for removal.



Press on the upper edge to fold it up.
For additional information, refer to
page [103](#)



When suspending clothing from the hooks, be sure that they will not obstruct the driver's vision. Do not hang heavy objects on the hooks. If you do so, they could cause personal injury, e.g. during braking or evasive maneuvers. ◀



The rear backrest is divided into two sections, one-third and two-thirds of the seat respectively. For carrying longer objects, you can fold down either section of the backrest separately.

Folding the rear backrest back

- 1 To unlock, pull the lever corresponding to the section (arrow)



- 2 The rear backrest section will move forward slightly when it is unlocked. Reach into the gap and pull the backrest down.



When you close the backrest, be sure that the retainer engages correctly. If it is not correctly engaged, transported cargo could enter the passenger compartment from the luggage compartment during brake applications or evasive maneuvers and endanger the vehicle occupants. ◀



Center 3-point-safety belt in the rear*

You can retract the 3-point-safety belt in the rear before folding the through-loading system back.

Retracting the 3-point-safety belt: Loosen the safety belt and insert the buckle latch into the support mount provided on the rear window shelf (arrow).



Always use the outside safety belts to mount the child restraint systems. Use the middle safety belt only if it is necessary to install three child restraint systems. Do not modify the child restraint system in any way. If you do so, it will not provide your child with maximum protection. ◀

96 Ski bag*

The ski bag allows the safe and clean transport of up to 4 pairs of standard skis or up to two snowboards.

The length of the ski bag and the additional space provided in the luggage compartment make it possible to carry skis up to 6.8 ft long (2.10 meters). Because of the tapered shape of the ski bag, it can only accommodate two pairs of skis 6.8 ft long (2.10 meters).



Loading

- 1 Fold the center armrest outward. Loosen the trim from the upper Velcro® fastener and place it on the armrest
- 2 Press button 1 downward and swing the cover forward
- 3 Extend the ski bag between the front seats. The zipper provides convenient access to stored items. It may be opened to allow the ski bag to dry
- 4 Press knob 2: the cover in the luggage compartment is unlocked.

To store the ski bag, perform the above steps in reverse sequence.

Securing the load

Secure the bag's contents by tightening down the retaining strap at the buckle.

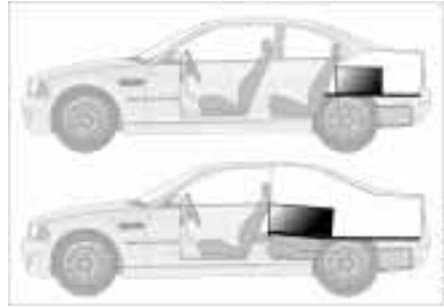


Please be sure that the skis are clean before loading them into the bag. Be careful to avoid damage from sharp edges. ◀

Cargo loading



Always position and secure the load correctly. If you do not, it can endanger the passengers during braking or evasive maneuvers. Do not exceed the permissible gross weight and axle load (refer to page 168), otherwise the vehicle's operating safety is no longer assured and you are in violation of the law. Do not stow heavy or hard objects in the passenger compartment without first securing them. Otherwise they would be thrown around during braking and evasive maneuvers and endanger the occupants. ◀



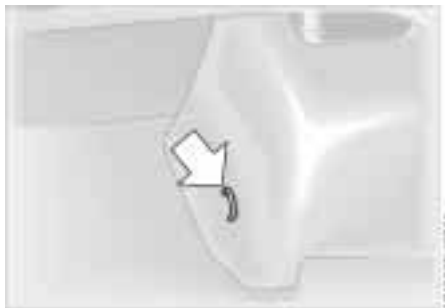
Stowing cargo

If you are transporting a load in your BMW:

- ▷ Load heavy cargo as far forward as possible – directly behind the backrests or the luggage compartment partition – and as low as possible
- ▷ Cover sharp edges and corners
- ▷ Do not pile objects higher than the top edge of the backrest



- ▷ If you are transporting very heavy loads when the rear seat is not occupied, secure the outer safety belts in the opposite buckles (refer to the illustration).



Securing the cargo in the luggage compartment

- ▷ For small, light items, use the rubber-lined non-skid side of the floor mat or secure with a luggage compartment net* or elastic straps (refer to page 39)
- ▷ For large, heavy pieces, see your BMW center for load-securing devices*. Lashing eyes (arrow) are provided at the inner corners of the luggage compartment for attaching these load-securing devices.

Read and comply with the information enclosed with the load-securing devices.

Roof-mounted luggage rack*



A special luggage system is available as an option for your BMW. Please observe the precautions included with the installation instructions.

Mounting points

Access to the mounting points:
To fold up the cover (arrow), please use the tool which is provided with the luggage system.

Loading and driving notes

Because roof racks raise the center of gravity of the vehicle when loaded, they exercise a major effect on its handling and steering response.

When loading, be sure to remember not to exceed the approved roof weight, the approved gross vehicle weight or

the axle loads. You will find the specifications under "Technical Data" on page 168.

Make sure that the load is not too heavy, and attempt to distribute it evenly. Always load the heaviest pieces first (on the bottom). Be sure that adequate clearance is maintained for raising the sliding/tilt sunroof, and that objects do not project into the opening path of the luggage compartment lid.

Secure the roof luggage correctly and securely to prevent it from shifting or being lost during driving (danger to following traffic).

Drive smoothly and avoid sudden acceleration or braking. Do not corner at high speeds.

The luggage rack and roof luggage increase the amount of surface exposed to the wind: increased fuel consumption and additional strains on the vehicle's body result from this.



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To ensure that your vehicle provides maximum economy throughout a long service life, we request that you observe the following instructions:



Because of its engineering design, the BMW M3 is an especially high-quality vehicle. It is in your best interest to follow the break-in procedure very closely. Doing this, you will create the basis for a long, optimum service life. ◀

Engine and differential

- ▷ Until a mileage reading of 1,200 miles (2,000 km): drive at varying engine and road speeds, but do not exceed the following engine speeds or road speeds:
5,500/rpm or 105 mph (170 km/h)

Obey your local and state maximum speed limits.

Do not depress the accelerator pedal to the full-throttle position.

- ▷ After you have monitored the break-in period for 1,200 miles (2,000 km), you can begin to gradually increase both the engine speed and road speed.

You should also comply with these break-in procedures if the engine or differential is replaced later in the course of the vehicle service life.

Tires

Due to technical factors associated with their manufacture, tires do not achieve their full traction potential until an initial break-in period has elapsed. Thus drive with extra care during the initial 200 miles (300 km).

Obey your local and state maximum speed limits.



When the vehicle is operated on wet or slushy roads, a wedge of water may form between the tire and the road surface. This phenomenon is referred to as aquaplaning, or hydroplaning, and can lead to partial or complete loss of traction, vehicle control and braking effectiveness. Reduce your speed on wet roads. ◀

Brake system

Approximately 300 miles (500 km) must elapse before the brake pads and disks achieve the optimal pad-surface and wear patterns required for trouble-free operation and long service life later on.

To break-in the separate parking brake drums, apply the parking brake lightly when coasting to a standstill (at a traffic signal, for instance), provided that traffic conditions allow you to do so. To avoid corrosion, repeat this procedure from time to time.



The brake lamps do not come on when the parking brake is set. Vacuum for the brake system servo unit on your BMW is available only when the engine is running. When you move the vehicle with the engine off – when towing, for example – substantially higher levels of pedal force will be required to brake the vehicle. ◀

Clutch

The clutch will also begin to function optimally after about 300 miles (500 km). Drive cautiously during this break-in period and do not shift roughly.

Driving notes



Brakes: do not drive with your foot resting on the brake pedal. Even light but consistent pedal pressure can lead to high temperatures, brake wear and possibly even brake failure.

Aquaplaning:

When driving on wet or slushy roads, reduce vehicle speed. If you do not, a wedge of water may form between the tires and the road surface. This phenomenon is referred to as aquaplaning, or hydroplaning, and can lead to partial or complete loss of traction, vehicle control and braking effectiveness.

Driving through water:

Do not drive through water on the road if it is deeper than 1 foot (30 cm), and then only at walking speed. Otherwise, the vehicle's engine, the electrical systems and the transmission may be damaged.

Rear window shelf:

Never use it to store heavy or hard objects, otherwise, occupants could be injured if the vehicle is braked hard. ◀

Catalytic converter

The catalytic converter reduces harmful exhaust emissions.

It is designed for use with unleaded fuel only. Even minute quantities of lead would be enough to permanently damage both the catalytic converter and the system oxygen sensor.

To ensure efficient, trouble-free engine operation and avoid potential damage:

- ▷ Be sure to comply with the scheduled maintenance requirements
- ▷ Fill the fuel tank well before it is empty
- ▷ Tow-start only when the engine is cold. If you attempt to tow-start with a warm engine, unburned residual fuel in the catalytic converter could ignite and cause damage. It is better to start the vehicle with an outside starting aid
- ▷ Avoid other situations in which the fuel is not burned or burns incompletely such as frequent or extended starter engagement or repeated start attempts in which the engine does not start. Stopping and restarting an engine which is running properly does not present a problem. Never allow the engine to run with any of the spark plug cables disconnected.



Be sure to observe the instructions above to prevent unburned fuel from reaching the catalytic converter. Otherwise there is danger of overheating and damage to the catalytic converter.

Extreme temperatures occur at the catalytic converter on this and every catalyst-equipped vehicle. Heat shields are installed adjacent to some sections of the exhaust system. Never remove these shields; do not apply undercoating to their surfaces. When driving, standing at idle or when parking, take precautions to avoid contact between the hot exhaust system and easily flammable materials (grass, hay or leaves, for example). Such contact could lead to a fire, resulting in personal injury and property damage. ◀

The concept

ABS keeps the wheels from locking while braking, thereby enhancing active driving safety. The reason: locked wheels are dangerous. When the front wheels slide, the driver loses steering control over the vehicle. Traction loss at the rear wheels can cause the rear end to break into an uncontrolled skid.

Based on current road conditions, ABS can brake the vehicle within the shortest possible distance and with the greatest possible driving stability (on straight-aways and curves, asphalt, ice, wet road surfaces, etc.).

ABS is designed to meet two essential requirements during every brake application:

- ▷ To help provide vehicle stability
- ▷ To help maintain steering control and maneuverability – on all types of road surfaces (asphalt, concrete, mud, wet, snow, ice).

Braking with ABS

The system becomes operative once the vehicle exceeds a speed of approx. 6 mph (10 km/h). Whenever the vehicle's speed drops below approx. 4 mph (6 km/h), the ABS is deactivated. This means that the wheels can lock in

the final phase of a panic stop – a factor of no significance in actual use.

The ABS system works best in situations requiring maximum pressure on the pedal ("panic stop"). Do not let up on the brake pedal even after it starts pulsating. Since the vehicle maintains steering responsiveness, you can nevertheless avoid possible obstacles with a minimum of steering effort.

The ABS closed-loop control circuit cycles in fractions of a second. Pulsation at the brake pedal shows you that ABS is active, that you are braking within the ABS' braking range and that you are thus pushing the limit of the system. In addition, a pulsation – a result of the control function cycles – indicates to the driver that the vehicle speed should be reduced to adapt to road surface conditions when there is reduced traction and grip between tires and road surface (slippery road surface).

On road surfaces with a loose surface layer over a firm base, e.g. on gravel or snow, as well as when driving with snow chains on, braking distances may be longer for a locked-wheel condition. However, ABS continues to provide enhanced vehicle stability and steering response under these conditions.

Information for your safety

Not even ABS can suspend the laws of physics. The consequences of hitting the brakes when there is inadequate distance between vehicles, when the vehicle is driven at excessive speeds through curves, or during aquaplaning, remain the driver's responsibility. You should never allow the added safety of ABS to lull you into a false sense of security, or mislead you into taking risks that could affect your own safety and that of others.



Do not make any modifications to the ABS system.

Service procedures on ABS are to be performed by authorized technicians only. ◀

**Antilock Brake System (ABS)/
Cornering Brake Control (CBC)**

CBC is an advanced engineering design of the ABS. When braking while cornering at high speed or braking during high lateral acceleration, or when braking during a lane change, vehicle stability is improved and steering response is enhanced.

Antilock Brake System (ABS)

In the event of a malfunction



If the ABS warning lamp does come on, refer to page 21. The brake system will then function the same as on vehicles without ABS. However, have the brake system checked by your BMW center as soon as possible. To prevent undetected defects and cumulative faults from adversely affecting the brake system, refer any problems to your BMW center at the earliest opportunity.



ABS warning lamp for Canadian models.



If the brake warning lamp comes on together with the indicator lamps for ABS and DSC, refer to page 21, the entire ABS, CBC and DSC control system has failed. Continue driving cautiously and defensively. Avoid full brake applications. This could cause the vehicle to lose stability and you might no longer be able to control it. Have the system checked by your BMW center as soon as possible.



ABS, CBC and DSC indicator and warning lamps for Canadian models.

Disk brakes furnish optimum deceleration and braking control and greater fade resistance under heavy use.

When the vehicle is driven only occasionally, during extended periods when the vehicle is not used at all, and in operating conditions where brake applications are less frequent, there is an increased tendency for corrosion of the disks and accumulation of contamination on the brake pads. This occurs because the minimal pressure that must be exerted by the pads to clean the disks by brake applications is not reached.

If the brake disks are corroded, they will tend to respond to braking with a pulsating effect which even extended application will fail to cure.



For your own safety: use only brake pads which BMW has approved for your specific vehicle model. BMW cannot evaluate non-approved brake pads to determine if they are suited for use, and therefore cannot ensure the operating safety of the vehicle if they are installed. ◀

Driving notes

While driving on wet roads or in heavy rain, it is a good idea to apply light pressure to the brake pedal every few miles or kilometers. Watch traffic conditions to ensure that this maneuver does not endanger other road users. The heat which is generated by the brake applications helps to dry the brake pads and disks.

Maximum braking force is obtained while the wheels continue to rotate, peaking when the wheels remain on the verge of locking without actually doing so. ABS maintains this state automatically. If the ABS should ever fail, pump the brakes if possible (refer to page 109).

Extended or steep mountain descents should be driven in the gear in which only minimal periodic brake application is required. This avoids excessive strain on the brakes and possible impairment of the braking effect. Stay within the allowable engine speed range. For further information, refer to page 69.

The braking effect of the engine can be further increased by downshifting, into first gear, if necessary.

Should engine braking prove inadequate, you should still avoid extended, continuous braking. Instead of maintaining low to moderate pressure over an extended period of time, you should decelerate the vehicle by applying more substantial force on the pedal (watch for following traffic). Pause before repeating the brake application. This staggered braking technique allows the brakes to cool in the intervals between active braking phases, preventing overheating and ensuring that full braking capacity remains available at all times.



Do not coast with the clutch depressed, with the shift lever in neutral or with the engine shut off. The engine does not provide any braking effect with the transmission in neutral or with the engine shut off. Do not allow floor mats, carpets or any other objects to protrude into the area around the brake pedal, the clutch or the accelerator which could obstruct their freedom of movement. ◀

Brake system

Brake fluid level



If the brake warning lamp comes on with the parking brake released:

The brake fluid level is too low in the reservoir (refer to page [126](#)).

If the brake fluid level is too low and brake pedal travel has become noticeably longer, there may be a defect in one of the brake system's hydraulic circuits.



Brake warning lamp for Canadian models.



Proceed to the nearest BMW center. Higher brake application pressure may be necessary under these conditions, and brake pedal travel may be significantly longer. Please remember to adapt your driving style accordingly. ◀

Brake pads



If the warning lamp for the brake pads lights up: only the minimum pad thickness still remains on the brake pads. Proceed to the nearest BMW center as soon as possible to have the pads replaced.



For your own safety: use only brake pads which BMW has approved for your specific vehicle model. BMW cannot evaluate non-approved brake pads to determine if they are suited for use, and therefore cannot ensure the operating safety of the vehicle if they are installed. ◀

The onset of winter is often accompanied by rapid changes in weather. Adaptations in driving style should be accompanied by preparations on the vehicle itself to ensure that your progress through the winter remains safe and trouble-free.

Coolant

Be sure that the coolant mixture contains the year-round ratio of 50:50 water and antifreeze/corrosion inhibitor. This mixture provides protection against freezing down to approx. -34 °F (-37 °C). Have the coolant replaced every 4 years.

Locks

BMW door lock deicer can be used to free them if frozen. This deicer also contains lubricant. After using deicer, treatment with BMW lock barrel grease is recommended.

Rubber seals and components

To prevent the weather-stripping from freezing, apply a spray-on rubber treatment or silicone spray to the door, hood and luggage compartment lid seals.



A full range of car-care products is available from your BMW center. ◀

Snow chains

Mount BMW snow chains*, whether on summer or winter tires, in pairs on the rear wheels only, keeping the manufacturer's safety instructions in mind. Do not exceed a maximum speed of 30 mph (50 km/h) with snow chains. In rare situations like these, it is advisable to turn off the DSC and RDW. Refer to page [76](#) or page [78](#).

Starting off

When trying to drive out of deep snow, or when "rocking" the vehicle to free it, it may be advisable to temporarily deactivate the DSC system. Refer to page [76](#).

Driving on low-traction road surfaces

Use smooth, gentle pressure to control the accelerator pedal. Avoid excessive engine speeds and shift to the next higher gear at an early point. Adapt your speed and driving style when approaching grades or slopes. Maintain an adequate distance between yourself and the vehicle ahead.

Winter operation

Braking

Winter road conditions substantially reduce the amount of traction available between the tires and the road surface; the resulting increase in braking distance is considerable and should always be kept in mind.

ABS is intended to prevent the wheels from locking during brake applications, thus helping to maintain vehicle stability and steering response.

If the ABS does not respond in a critical braking situation and the wheels lock:

Reduce the pressure on the brake pedal until the wheels just start to roll again while still maintaining enough force to continue braking. Then increase the pressure, reduce the pressure when the wheels lock, reapply pressure etc.

This staggered braking procedure will reduce stopping distances while helping you maintain steering control. You can then attempt to steer around hazards after you have reduced pressure on the brake pedal.



Do not shift down on slick road surfaces. Doing so could cause the rear wheels to lose traction and skid, which could result in the loss of vehicle control. ◀



Depress the clutch during hard braking on road surfaces which provide only poor or uneven traction. ◀

Skid control

Depress the clutch and let up on the gas. Countersteer carefully and attempt to regain control of the vehicle.

Parking

Engage first or reverse gear. Depending on the steepness of the incline, you can apply the parking brake as well. In order to prevent the parking brake pads from locking due to frost or corrosion, dry them by gently applying the parking brake as the vehicle is coming to a stop. Make sure that following traffic is not endangered.



The brake lamps do not light up when the parking brake is applied. ◀

If the steering response changes, e.g. high steering effort:
Consult a BMW center to have it checked.



If the power steering fails, increased effort will be required to steer the vehicle. ◀

Cellular phone*

Only mobile communications systems (cellular phone, radio, etc.) with an output up to 10 watts are permitted. Mobile communications devices not specifically designed for use in your vehicle may trigger malfunctions while operating your vehicle. BMW can neither test nor assume responsibility for every individual product being offered on the market. We recommend that you consult your BMW center before purchasing any device of this kind.

To ensure that your BMW continues to provide reliable and trouble-free operation, do not use a cellular phone or other radio device with an antenna located inside the passenger compartment. The antenna should always be mounted on the outside of the vehicle.



Before loading the vehicle on a car-carrier train or driving it through a car-wash, remove the antenna. ◀

Radio reception

The reception and sound quality obtained from mobile radios vary according to a variety of factors, including the broadcast range of the transmitter and the directional orientation of the antenna. Interference factors such as high-tension power lines, structural or natural obstructions can all lead to unavoidable reception interference, regardless of how well the vehicle sound system is operating. Climatic factors such as intense solar radiation, fog, rain and snow can also interfere with reception.

Telephones without formal BMW approval can also generate interference. This phenomenon assumes the form of a low-pitched hum emanating from the speaker system.

Please refer to the separate Owner's Manual that came with your vehicle for information on setting and operating your car radio.


Tire inflation pressure

Information for your safety

The factory-approved radial tires are matched to the vehicle and have been selected to provide optimum safety and driving comfort on your vehicle.

It is not merely the tire's service life, but also driving comfort and – above all else – driving safety that depend on the condition of the tires and the maintenance of the specified tire pressure.

Incorrect inflation pressure is a frequent cause of tire damage. It also significantly influences the roadholding ability of your BMW.

 Check tire inflation pressures on a regular basis (refer to page 27), at least every two weeks and before beginning a longer trip. If this is not done, incorrect tire pressures can cause driving instability and tire damage, ultimately resulting in accidents. ◀


Tire condition



Tire tread – Tire damage

Inspect your tires frequently for tread wear, signs of damage and for foreign objects lodged in the tread. Check the tread depth.

Tread depth should not be allowed to go below 0.12 in (3 mm), even though the legally specified minimum tread depth is only 0.063 in (1.6 mm). At a tread depth of 0.063 in (1.6 mm), tread depth indicators (arrow) in the tread-groove base will indicate that the legally permissible wear limit has been reached. Below 0.12 in (3 mm) tread depth, there is an increased risk of aquaplaning, even at relatively moderate speeds and with only small amounts of water on the road.

 Do not drive on a deflated (flat) tire. A flat tire greatly impairs steering and braking response, and can lead to complete loss of control over the vehicle.

Avoid overloading the vehicle so that the permitted load on the tires is not exceeded. Overloading can lead to overheating and increases the rate at which damage develops inside the tires. You could have a blowout as a result.

Unusual vibrations encountered during normal vehicle operation can indicate tire failure or some other vehicle defect. This is also true for irregularities in the vehicle's handling characteristics, such as a pronounced tendency to pull to the left or right. Should this occur, respond by immediately reducing your speed. Proceed carefully to the nearest BMW center or professional tire center, or have the vehicle towed in to have it and its tires inspected.

Tire damage (up to and including blow-outs) can endanger the lives of both the vehicle occupants and other road users. ◀

112 Tire replacement


To maintain good handling and vehicle response, use only tires of a single tread configuration from a single manufacturer. BMW tests and approves wheel/tire combinations. Refer to page 116.

DOT Quality Grades

Treadwear

Traction AA A B C

Temperature A B C

 All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. ◀


Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 would wear one and one-half ($1 \frac{1}{2}$) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction


The traction grades, from highest to lowest, are AA, A, B, and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

 The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, aquaplaning, or peak traction characteristics. ◀

Temperature

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger vehicle tires must meet


under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

 The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure. ◀

Uniform Tire Quality Grading

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:

Tread wear 200 Traction AA
Temperature A

 Do not use retreaded tires, since driving safety may be impaired by their use. This is due to the possible variations in casing structures and, in some cases, to their extreme age, factors that can lead to a decrease in their durability. ◀

Tire replacement

Tire age

The date on which the tire was manufactured is indicated by the code on the sidewall:

DOT ... 4 100 means that the tire was produced in the 41st week of the year 2000.

BMW recommends the replacing all tires after 6 years at the latest, even if a tire life of 10 years is possible.

Tire rotation

Re-initialize the Tire Pressure Warning (RDW) after rotating the tires. See page [78](#) for further information.

Summer tires



Due to different tire sizes on the front and rear axles (refer to page [116](#)), the tires may not be rotated from one axle to the other. ◀

Winter tires

The tread wear patterns at the front end differ from those at the rear – the actual patterns will vary according to individual driving conditions. In the interests of safety and maintaining optimal handling characteristics, tire rotation is not recommended.

If a proposed interaxle rotation of tires is based on economic considerations, one should consider whether the costs for the rotation are likely to be recaptured by any increase in the service life of the tires that might be realized. Rotation must always be carried out at short intervals (max. 3,000 miles/ 5,000 km). Consult your BMW center for more information.

Should you decide to rotate the tires, it is essential that you comply with the following: rotate tires on the same side only, since braking characteristics and road grip could otherwise be adversely affected.

Following rotation, correct the tire inflation pressure.

The right choice

Use only wheels and tires approved by BMW for the corresponding vehicle model, as otherwise the tires may make contact with the body as the result of tolerances despite the same nominal size being used, resulting in serious accidents. If non-approved wheels and tires are used, BMW cannot evaluate their suitability, and therefore cannot be held liable for driving safety. ◀

For wheel and tire specifications approved by BMW, refer to page 116.



The correct wheel-tire combination affects different systems that otherwise will not function properly, e.g. ABS, DSC.

For this reason, use only tires of the same brand and tread pattern on the vehicle and, for example, restore the approved wheel-tire combination following a flat tire as soon as possible. ◀

Codes on tires and wheels

The code on tires has the following meaning.

Codes on radial tires:

e.g. 225/45 R 18 92 W

Nominal width in mm	_____	225	/	45	R	18	92	W
Aspect ratio in %	_____			45				
Radial tire code	_____			R				
Rim diameter in inches	_____			18				
Load rating	_____					92		
Speed rating	_____					W		

(not on ZR tires)

(before R on ZR tires)

The speed rating indicates the approved maximum speed for the tire.

Summer tires:

S = up to 112 mph (180 km/h)
 T = up to 118 mph (190 km/h)
 H = up to 130 mph (210 km/h)
 V = up to 150 mph (240 km/h)
 W = up to 167 mph (270 km/h)
 Y = up to 187 mph (300 km/h)
 ZR = over 150 mph (240 km/h)

Winter tires:

Q M+S = up to 100 mph (160 km/h)
 T M+S = up to 118 mph (190 km/h)
 H M+S = up to 130 mph (210 km/h)

Codes on light-alloy wheels:

e.g. 8 J x 8 H 2

Rim width in inches	_____	8	J	x	8	H	2
Code letter for flange type	_____	J					
Symbol for full-drop center rim	_____			x			
Rim diameter in inches	_____			8			
Hump on the 2 rim shoulders	_____					2	

Protect valve stems and valves from dirt using screw-on valve stem caps. Dirt in the valves frequently leads to slow leaks.

Storage

Store tires in a cool, dry place, protecting them against light whenever possible. Protect the tires against contact with oil, grease and fuel.

Choosing the right tire

BMW recommends winter tires (M+S radial tires) for operation under inclement winter driving conditions. While so-called all season tires (M+S designation) provide better winter traction than summer tires with the load ratings H, V, W, Y and ZR, they generally do not achieve the performance of winter tires.

In the interests of safe tracking and steering response, install radial tires made by the same manufacturer and with the same tread configuration on all four wheels if you elect to mount winter tires.

Do not exceed specified maximum speeds

In Germany: attach a corresponding sign in accordance with the Federal Motor Vehicles Safety Standards in your field of vision if the maximum speed of the vehicle is higher. This sticker is available from the tire dealer or your BMW center.



Never exceed the maximum speed for which the tires are rated.

Unprofessional attempts by laymen to service tires can lead to damage and accidents.

Have this work performed by skilled professionals only. Your BMW center will be glad to assist you with both their expertise and the proper equipment for your vehicle. ◀

Tire condition, tire pressure

Winter tires display a perceptible loss in their ability to cope with winter driving conditions once the tread wears to below 0.16 in (4 mm), and should thus be replaced.

Comply with the specified tire inflation pressure and be sure to have the wheels balanced each time a tire or wheel is changed. In addition, also have the Tire Pressure Warning (RDW) reinitialized, for details refer to page 78.

The use of narrow-link BMW snow chains on winter tires is approved only in pairs and only on the rear wheels. Comply with all manufacturer's safety precautions when mounting the chains.



Deactivate the Tire Pressure Warning (RDW) when using snow chains. The snow chains can lead to malfunction warnings and undetected losses in pressure.

For further information, refer to page 78. ◀


116 **Approved wheel and tire specifications**

BMW tests certain tire brands for each tire size, classifies them as road-safe and approves them. Consult your BMW center for more information. Observe any regulations applicable in the country of use, e.g. requiring entry in the vehicle documents.

Tire specifications	Light-alloy wheels
BMW M3	
Summer	
Front: 225/45 ZR 18	8J x 18 EH2
Rear: 255/40 ZR 18	9J x 18 EH2
Front: 225/40 ZR 19	8J x 19 EH2
Rear: 255/35 ZR 19	9.5J x 19 EH2
Winter tires (M+S)	
225/45 R 17 91 H	7.5Jx17 EH2

Snow chains*

It is not possible to mount snow chains on 18 and 19-inch wheels.

 Deactivate the tire pressure control (RDW) when using snow chains. The snow chains can lead to malfunction warnings and undetected losses in pressure. For further information, refer to [78](#).◀



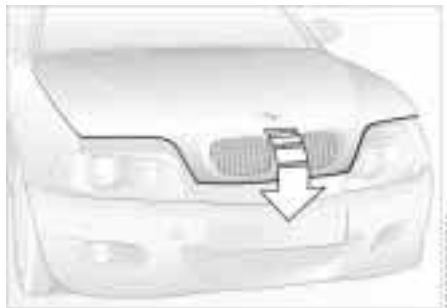
Do not work on your vehicle without appropriate skills. Always switch off the engine and allow it to cool down before working in the engine compartment. Always disconnect the battery before working on any electrical systems or equipment, especially when these are located within the engine compartment. Comply with all applicable instructions and warnings. Failure to work in an informed, professional manner when servicing components and materials constitutes a safety hazard for vehicle occupants and other road users. If you are not familiar with the guidelines, please have the operations performed by your BMW center. ◀

**To unlock**

Pull the lever located under the left-hand side of the instrument panel.

**To open**

Pull the release handle and open the hood.



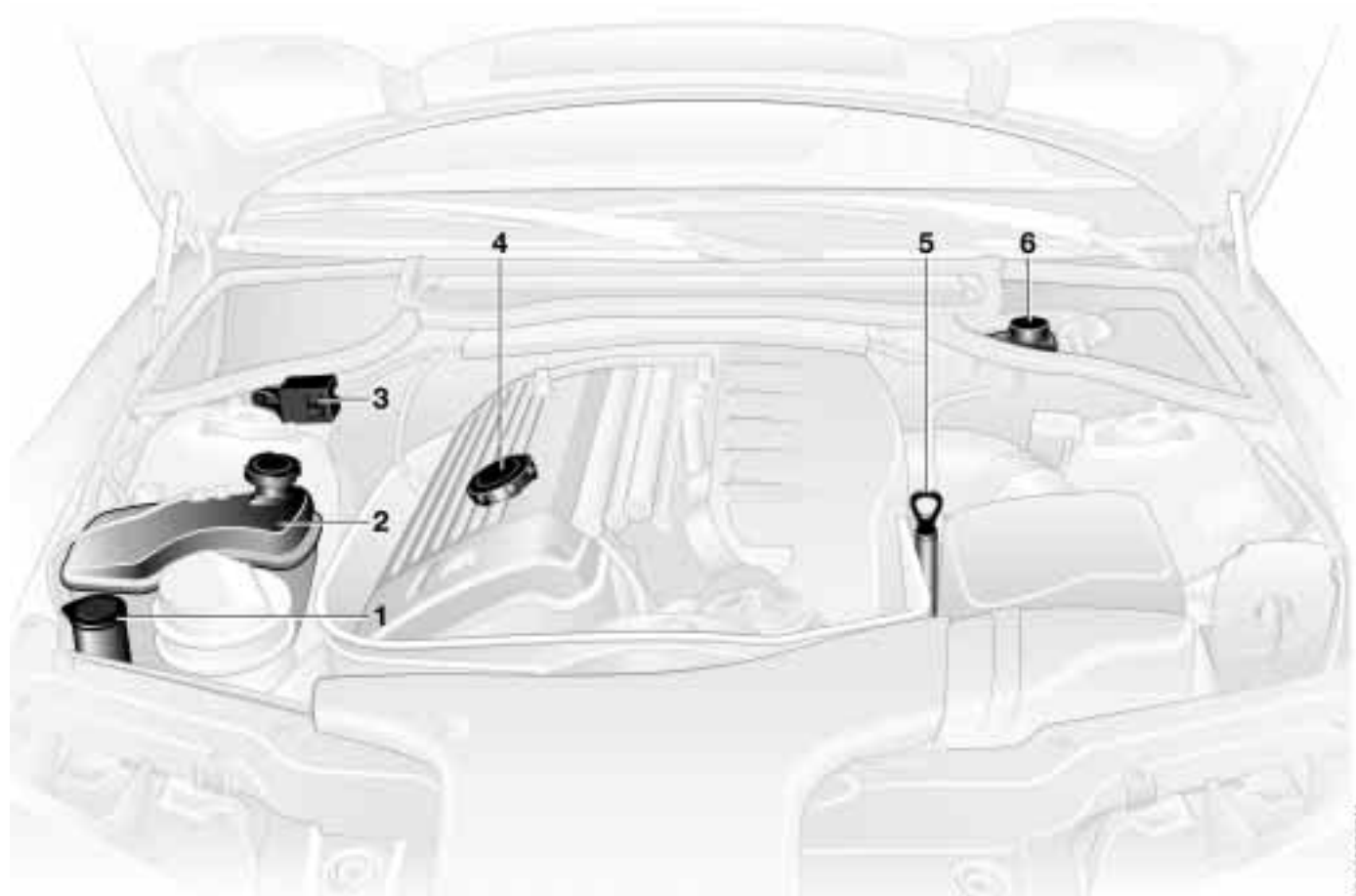
To close

Allow the hood to fall from a height of about 12 in (30 cm) so that it audibly engages.



To avoid injuries, be sure that the travel path of the hood is clear when it is closed, as with all closing procedures. If it is determined that the hood is not completely closed while driving, stop immediately and close it securely. ◀

120 Engine compartment



Engine compartment

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- 1 Filler neck for headlamp and wind-shield washer cleaning system [122](#)
- 2 Coolant expansion tank [125](#)
- 3 Positive terminal connection (for jump starting) (positive terminal) [154](#)
- 4 Engine oil filler neck [123](#)
- 5 Engine oil dipstick [123](#)
- 6 Filler neck for brake fluid [126](#)

Overview

Controls

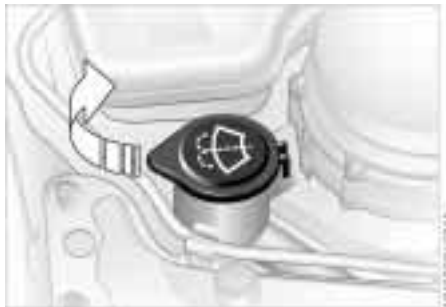
Car care

Repairs

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Headlamp and windshield washer system

Capacity: approx. 5.6 US quarts
(5.3 liters).

Fill with water and – if required – with a washer antifreeze (according to manufacturer's recommendations).



We recommend that you mix the washer fluid before adding it to the reservoir. ◀



Antifreeze for the washer systems is flammable. For this reason, keep them away from sources of flame and store them only in their original containers. Store them so that they are inaccessible to children. Comply with the instructions on the containers. ◀

Washer nozzles

Headlamp washer system*

Have this system adjusted by your BMW center as required.

Windshield washer system

Windshield:

The spray nozzles are permanently set and ensure effective cleaning even at high speeds.



The oil quantity between the two marks on the dipstick corresponds to approx. 1.1 US quarts (1 liter).



Checking the oil level

- 1 Park the vehicle on a level surface
- 2 Shut the engine off after it has reached normal operating temperature
- 3 After approx. 5 minutes, pull the dipstick out and wipe it off with a clean lint-free cloth, paper towel or similar material
- 4 Carefully push the dipstick all the way into the guide tube and pull it out again
- 5 The oil level should be between the two marks on the dipstick.

As with fuel economy, oil consumption is directly influenced by your driving style and vehicle operating conditions.

To add oil

Wait until the level has dropped to just above the lower mark before adding oil. However, never let the oil drop below the lower mark.

Do not fill beyond the upper mark on the dipstick. Excess oil will damage the engine.



BMW engines are designed to operate without oil additives; the use of additives could lead to damage in some cases. This is also true for the manual transmission, the differential, and the power steering system. ◀

Recommendation: have the oil changed by your BMW center only.



Continuous exposure to used oil has caused cancer in laboratory testing. For this reason, thoroughly wash any areas of skin that come into contact with oil using soap and water. Always store oils, grease and similar materials so that they are inaccessible to children. Comply with warning labels and information on containers. ◀



Comply with the applicable environmental laws regulating the disposal of used oil. ◀

Approved engine oil

The quality of the engine oil is extremely important for the function and life of an engine. Based on extensive testing, BMW has approved only certain types of engine oils.

Use only approved "BMW High Performance Synthetic Oil".

If you are unable to obtain "BMW High Performance Synthetic Oil," you may use small quantities of other approved synthetic oils for topping up between oil changes. Use only oils with the specification API SH or higher.



Ask your BMW center for details concerning the specific "BMW High Performance Synthetic Oil" or synthetic oils that have been approved. ◀

You can also call BMW of North America at 1-800-831-1117 or visit the website www.bmwusa.com to obtain this information.

Viscosity ratings

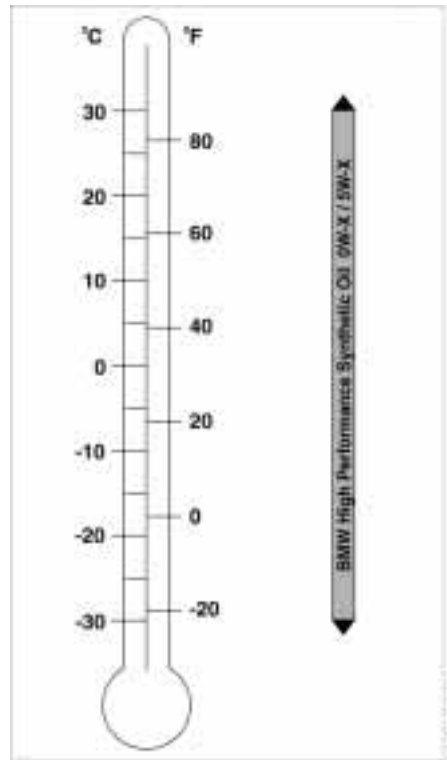
Viscosity is the oil flow rating as established in SAE classes.

The selection of the correct SAE class depends on the climatic conditions in the area where you drive your BMW.



Approved oils are in SAE classes 5W-40 and 5W-30. ◀

These oils may be used for driving in all ambient temperatures.



Coolant



Do not add coolant to the cooling system when the engine is hot. If you do, escaping coolant can cause burns.

To avoid the possibility of damage later on, never use anything other than factory-approved, nitrite and amino-free extended-duty antifreeze with corrosion inhibitor. Your BMW center is familiar with the official specifications. Antifreeze and anticorrosion agents are hazardous to health. You should always store them in original containers and in a location inaccessible to children.

Extended-duty antifreeze with corrosion inhibitor contains ethylene glycol, a flammable substance. For this reason, do not spill long-life antifreeze with corrosion inhibitor on hot engine parts. It could catch fire and cause burns. ◀



Check the coolant level and add coolant

Check the coolant level when the engine is cold (approx. 68 °F or +20 °C). The coolant gauge needle in the instrument cluster must be located in the blue field, as otherwise you could be scalded when adding more fluid.

- 1 Open the cap for the expansion tank by turning it slightly counter-clockwise to allow accumulated pressure to escape. Then open
- 2 The coolant level is correct whenever the upper end of the red float rod is aligned with the upper edge of the filler neck (refer to the arrow in the illustration and the schematic diagram next to the filler neck as well)

- 3 If the coolant is low, slowly add coolant until the correct level is reached – do not overfill.

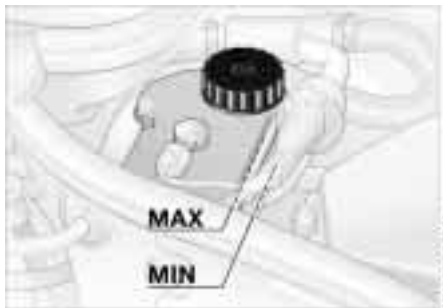
The coolant is a mixture of water and extended-duty antifreeze with corrosion inhibitor. Always maintain the prescribed all-season 50:50 mixture ratio for year-round protection against internal corrosion. No other additives are required.

Change the coolant

Replace the coolant every three years.



Comply with the applicable environmental laws regulating the disposal of extended-duty antifreeze with corrosion inhibitor. ◀



If the brake warning lamp comes on and the parking brake has been released: check the brake fluid level and if necessary, fill it up to the "MAX" mark.

For adding brake fluid or for determining and correcting the cause of brake fluid loss, consult your BMW center. Your BMW center is familiar with the specifications for factory-approved brake fluids (DOT 4).

Due to loss of brake fluid, pedal travel can lengthen and braking efficiency may be reduced. Comply with the instructions for this found on page [107](#).



Brake fluid is hygroscopic, that is, it absorbs moisture from the air over time.

In order to ensure the brake system's safety and reliability, have the brake fluid changed every two years by an authorized BMW center. Refer also to pages [71](#), [151](#) and to the Service and Warranty Information Booklet (US - models) or the Warranty and Service Guide Booklet (Canadian models).

Brake fluid is toxic and damages the vehicle's paint. You should always store it in its original container and in a location inaccessible to children.

Do not spill brake fluid and fill the brake fluid reservoir only as far as the "MAX" mark. The brake fluid could ignite upon contact with hot engine parts and cause burns. ◀



Comply with the applicable environmental laws regulating the disposal of brake fluid. ◀

Vehicle Identification



In the engine compartment, on the right-hand strut dome (arrow).



The BMW Maintenance System has been designed as a reliable means of providing maximum driving and operating safety – and as cost-effectively as possible for you.

Please keep in mind that regular maintenance is not only necessary for the safety of your vehicle, but also plays a significant role in maintaining the resale value of the vehicle.

Service Interval Display

Advanced technology is employed to calculate the optimal maintenance intervals. These are then indicated in the Service Interval Display. While conventional systems rely on distance traveled alone to determine when service is due, the BMW Maintenance

System has for years considered the actual conditions under which the vehicle operates, because miles can be traveled in many different ways: for example, 62,000 miles (100,000 km) of short-distance driving are not equal to the same 62,000 miles (100,000 km) of long-distance travel. In response to this fact, the BMW Maintenance System monitors operating conditions as the basis for determining the service intervals for your vehicle, it includes the Engine Oil Service and Inspections I and II.


Determining the maintenance intervals according to the actual loads on the vehicle covers every kind of operating situation. Those who drive fewer than 6,000 miles (10,000 km) per year should, nevertheless have their oil changed every 2 years at the most, no matter what the Service Interval Display indicates, since engine oil ages over time, regardless of loading.

Service and Warranty Information Booklet (US models)/Warranty and Service Guide Booklet (Canadian models)

For additional information on required maintenance intervals and procedures, please refer to the Service and

Warranty Information Booklet (US models), or the Warranty and Service Guide Booklet (Canadian models).

As a precaution against rust, it might be a good idea to have the body checked for damage from rocks or gravel at the same time, depending upon operating conditions.

 Have your BMW center do the maintenance and repair. Your BMW center is always "up to date" on the latest maintenance work and repair techniques and equipped with the required special tools. In addition, checking parts known from experience to be subject to wear is a permanent part of the maintenance specifications. Be sure that all maintenance work is confirmed in the Service and Warranty Information Booklet (US models), or in the Warranty and Service Guide Booklet (Canadian models). These entries are your proof that the vehicle has received regular maintenance. They are also a requirement for warranty claims. ◀

Washing your vehicle

You can have your BMW washed in an automatic car wash, even when it is new. Car wash systems that do not employ brushes are preferable.

Wipe away tough dirt and loosen and remove dead insects before washing the vehicle.

To prevent spots, avoid washing when the hood is still warm, or immediately after and during exposure to strong sunlight.

When using an automatic car wash, be sure that:

- ▷ The car wash system is suited for the dimensions of your vehicle
- ▷ No damage will occur on vehicles with attached body accessories (such as spoilers or antennas). Consult the car wash operator if necessary
- ▷ The wheels and tires of your vehicle cannot be damaged by the conveyance devices of the car wash system
- ▷ The vehicle is cleaned with minimum brush pressure, and that plenty of water is available for washing and rinsing.

Vehicles with rain sensor:

Clean the windshield regularly. Wax from automatic car washes or insects can cause malfunctions in the rain sensor function.



Turn the rain sensor off (refer to page 66) when going through an automatic car wash, otherwise, damage could occur from unintended wiper activation. ◀

Parts of the vehicle which are inaccessible to the automatic washer – such as door sills, door and hood edges, etc. – should be cleaned by hand.

In the winter months, it is especially important to ensure that the vehicle is washed on a regular basis. Large quantities of dirt and road salt are difficult to remove, and they also cause damage to the vehicle.



If spray wands or high-pressure washers are used, be sure to maintain an adequate distance between the spray source and the vehicle's surface. Inadequate distance and excessive pressure can damage or weaken the finish, making it more susceptible to subsequent attack. In

addition, moisture could penetrate to vehicle components, leading to long-term damage. ◀



When cleaning the headlamps, please observe the following:

Do not wipe dry with a cloth (scratches). Never use abrasives or strong solvents. Remove dirt and contamination (such as insects) by soaking with BMW Car Shampoo and then rinsing with plenty of water. Always use a deicer spray to remove accumulated ice and snow – never use a scraper. ◀



After washing the vehicle, apply the brakes briefly to dry them. Braking efficiency might otherwise be reduced by the moisture and the brake rotors could also corrode. ◀

Exterior finish

To provide effective corrosion protection, multilayer paintwork is applied at the factory. Cathaphoretic immersion priming techniques are supplemented with special body-cavity protectants, by applying specially developed and extensively tested materials.

A layer of flexible PVC is first applied to the undercarriage. Following this, a comprehensive undercoating treatment with a wax-based protectant is applied. Regular maintenance makes an important contribution to maintaining the safety and value of your vehicle.

Increasing awareness of the effects of harmful environmental factors on vehicle finishes have led paint and vehicle manufacturers to initiate programs designed to further improve the durability of their finishes. Despite this, regional environmental factors can have negative effects on your vehicle's finish. These should guide you in determining the frequency and extent of your efforts to maintain the vehicle finish.

Depending upon material and type of impact (perforation of paint layer), physical stresses from sand, road salt, gravel etc., can cause corrosion to extend beneath the finish, starting at the point of impact.

Road dirt, tar spots, dead insects, animal droppings (strong alkali effect) and tree excretions (resins and pollen) all contain substances capable of causing damage when allowed to remain on the finish of your vehicle for any period of time (spots, etching, flaking, separation in the top coat).

In industrial areas, deposits of flue dust, lime, oily soot, precipitation containing sulfur-dioxide (acid rain) and other environmental pollutants will damage the vehicle's finish unless adequate care is provided – even though this is generally limited to the outside horizontal surfaces.

In coastal regions, high levels of atmospheric salt and humidity promote corrosion.

In tropical zones, high humidity and heavy ultraviolet radiation prevail, in addition to temperatures of over 105 °F (+40 °C) in the shade. Under these conditions, light paints can reach temperatures up to 175 °F (+80 °C) and dark ones up to 250 °F (+120 °C).

Caring for the vehicle finish

Regular washing is a preventive measure against long-term effects from substances that are harmful to the vehicle's finish, especially if you drive your vehicle in areas with high levels of air pollution or aggressive natural substances (tree resins, pollen).

Nevertheless, you should immediately remove especially aggressive substances. Failure to do so can lead to changes in the paint's chemical structure or to discoloration. Gasoline spilled during refueling, oil, grease and brake fluid should always be cleaned away immediately, as should bird droppings (finish damage).

Any contamination remaining on the surface of the vehicle will be especially conspicuous after washing. Use cleaning fluid or alcohol with a clean cloth or cotton pad to remove. Remove tar spots with tar remover. After cleaning, the affected areas should be waxed to ensure continued protection.



Use the cleaning and car-care products that you can obtain at your BMW center. ◀

Waxing your vehicle

Protect the finish using only carnauba or synthetic-based waxes.

The best way to determine when the finish needs to be waxed is by noting when water stops beading on the surface.

You can use a glass cleaner to remove any wax or silicone that may have been left on the windows during waxing.



Use the cleaning and car-care products that you can obtain at your BMW center. ◀

Paint damage

You can touch up small areas of paint damage with a BMW spray paint or a BMW touchup stick.

The paint color code for your vehicle is provided on a sticker located on the right hand side under the hood and on the first page of your Service and Warranty Information Booklet (US models) or Warranty and Service Guide Booklet (Canadian models).

Damage caused by flying stones, scratches, etc., must be touched up without delay to prevent rust from forming.

If corrosion has started to form in an area with paint damage, remove all rust and clean the area. Then prime the area with a BMW Primer Stick. Finally, apply the finish coat. Wait a few days, then polish the repaired area. Finish by applying a wax preservative.

More extensive paint damage should be professionally repaired in accordance with the manufacturer's instructions. Your BMW center uses original BMW finish materials in accordance with factory-approved repair procedures.

Window care

You can use window and glass cleaner to clean inside window surfaces and mirrors without smearing and streaking. Never use polishing pastes or abrasive (quartz) cleansers on mirror lenses.

Clean the wiper blades with soapy water. The wiper blades should be replaced twice a year – before and after the cold season. This is especially important for vehicles equipped with rain sensor.



Use only wiper blades approved by BMW. ◀

Caring for your vehicle

Caring for other vehicle components and materials

Light-alloy wheels should be treated with alloy wheel cleaner, especially during the winter months. However, do not use aggressive products containing acids, strong alkalis or abrasives. Do not use steam cleaners operating at temperatures above 140 °F (+60 °C). Follow the manufacturer's instructions.

If your vehicle has chrome parts* such as window moldings, door handles or similar items, clean these parts carefully with ample clean water, and possibly a shampoo additive, especially if there is an accumulation of road salt. Use chrome polish as an additional treatment.

Plastic components, vinyl upholstery, headliners, lamp lenses, the clear cover of the instrument cluster and components with a sprayed dull black surface can be cleaned with water (add plastic shampoo as required). Do not allow moisture to soak through the seats or headliner. Never use solvents such as lacquer thinner, heavy-duty grease remover, fuels, or similar substances.

Rubber components should be cleaned with water only; a rubber treatment or silicone spray may also be applied.

The safety belts should be cleaned with a mild soap and water solution without being removed from the vehicle. Never attempt chemical or dry cleaning, as damage to the belt fabric could result.

After cleaning, never allow the inertia reel to retract the belts until they are completely dry. Dirty safety belts prevent the inertia reel mechanism from retracting the strap properly, and thus constitute a safety hazard.

Heavily soiled floor carpets and mats* can be cleaned with an interior cleaner. The floor mats can be removed from the vehicle for cleaning.

Use only a damp cloth to clean trim panels made of real wood* and other parts constructed of real wood*. Follow up by drying with a soft cloth.



Use the cleaning and car-care products that you can obtain at your BMW center. ◀

Care of upholstery materials

Depressions in the upholstery that result from everyday use can be brushed smooth by brushing against the nap with a lightly dampened brush.

The tendency of the pile to lie in a particular direction on velour upholstery is not a quality defect. Just as with home textiles or clothing, this cannot be avoided.

Lint on upholstery materials, textile or leather remnants that have been worn into the upholstery may be removed with a lint brush or a Velcro brush. A cleaning glove is available for particularly "stubborn" lint. Stains and fairly large areas of dirt should be cleaned off without delay, using lukewarm water and an interior cleaner, stain remover or appropriate cleaning fluid. Brush the fabric afterwards to restore its appearance.

If the vehicle will be stored for an extended period or if it is exposed to intense sunlight, cover all the seats or the windows to prevent fading.



Use the cleaning and car-care products that you can obtain at your BMW center. ◀

The buildup of an electrostatic charge on the seat covers, particularly if atmospheric humidity is low, can give the occupants an unpleasant electric shock if they touch metal body parts after leaving the vehicle. Although this is not dangerous in any way, it can be avoided by touching a bare or polished metal part of the vehicle while getting out.

Alcantara*

Clean using a gentle detergent, taking care not to rub or scratch. Then finish off by wiping it with a wet cloth.

Leather care

The leather upholstery* used by BMW is a natural product of the highest quality, processed using state-of-the-art methods to ensure that it will maintain its high quality for years to come, provided that it is properly cared for.

Because this product is manufactured using natural materials, you must make allowance for its special characteristics as well as for the peculiarities of its use and care.

Regular periodic cleaning and care are essential, as dust and road dirt act as abrasives in the pores and creases of

the material. This leads to wear spots and premature brittleness on the surface of the leather. We therefore suggest that you clean the leather with a vacuum cleaner or cloth at frequent intervals.

For cleaning, use BMW leather cleaning foam.

Since dirt and grease gradually attack the protective layer of the leather, the cleaned surfaces should be treated with BMW leather care agent. This also acts as an antistatic agent.

For protection against dampness or moisture, treat the leather with a BMW impregnating agent.

We recommend that you perform this procedure twice a year on leather exposed to normal use.

Spills should be wiped up immediately. Remove grease and oil stains without rubbing, but rather by dabbing with spot remover.

If the upholstery is exposed to intense sunlight or if the vehicle is going to be left parked for an extended period of time, cover all leather surfaces or all the windows to prevent fading.



Use the cleaning and car-care products that you can obtain at your BMW center. ◀



Cleaning agents can contain substances that are dangerous or pose health risks. Therefore, always comply with the warnings and danger notices on the package. Open the doors or windows on your vehicle when cleaning the interior. Never clean your vehicle with solvents or other materials not specifically intended for this purpose. ◀

Important safety notices



Don't remove the airbag restraint system's gas generator. Have testing and service procedures performed by specially-qualified technicians only. In the event of any faults, if the airbag stops working, or in the event of function-oriented use (deployment) of the airbag restraint system, entrust your BMW center alone with repair or disassembly.

No modifications may be made to either the wiring or to individual components. These include the padded steering wheel hub, the instrument panel, the side trim panels of the front or rear doors and the roof pillars or the sides of the headliner. Do not apply adhesive materials to these components, cover or modify them in any way. Do not remove or dismantle the steering wheel yourself.

To ensure compliance with official safety regulations, entrust disposal of airbag generators to a BMW center. Unprofessional attempts to service the system could lead to failure in an emergency or undesired airbag activation, either of which could result in personal injury. ◀

Consult your BMW center regarding special procedures if you intend to store the vehicle for more than three months.

Any BMW center will be happy to advise you concerning the advisability, legal implications and factory recommendations for technical modifications to the vehicle. For this purpose, the BMW center will require the Vehicle Identification Number and, in some cases, the engine number as well.

Light-Emitting Diodes (LEDs)

Light-emitting diodes installed behind translucent lenses serve as the light source for many of the controls and displays in your vehicle. The concept behind their operation is related to that employed for lasers, and they are officially designated as Class 1 light-emitting diodes.



Do not remove the protective lens and avoid staring directly at the unfiltered beam for extended periods (several hours). To do so could result in inflammation of the iris. ◀

California Proposition 65 Warning

California laws require us to state the following warning:



Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. ◀



The data link connector for onboard diagnostics is located on the left-hand side of the driver's side, on the underside of the instrument panel and under a cover panel. The cover is marked with the letters "OBD".

The purpose of the OBD system is to assure proper emission control system operation for the vehicle's lifetime by monitoring emission-related components and systems for deterioration and malfunction.



An illuminated indicator informs you of the need for service, not that you need to stop the vehicle. Your system should be checked, however, at the earliest possible opportunity.

If the indicator blinks or flashes, this indicates a high level of engine misfire. Reduce speed and contact your nearest BMW center immediately. Severe engine misfire over even a short period of time can seriously damage emission control system components, especially the catalytic converter.

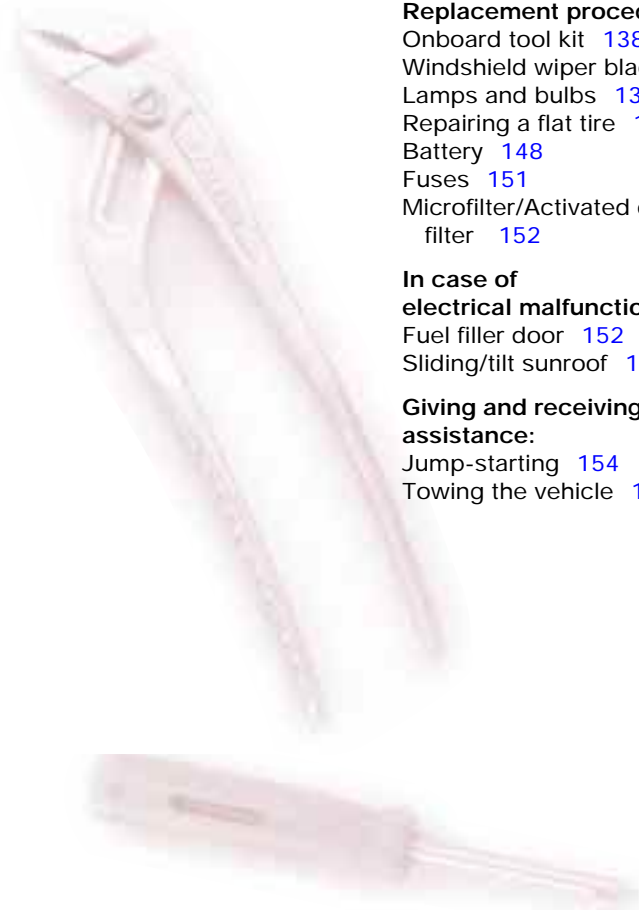


"Service Engine Soon" warning lamp for Canadian models.



If the fuel filler cap is not on tight enough, the OBD system can detect leaking vapor and the indicator will light up. If the fuel filler cap is then tightened, the indicator will usually go out after a short period of time. ◀



**Replacement procedures:**

Onboard tool kit [138](#)

Windshield wiper blades [138](#)

Lamps and bulbs [138](#)

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The onboard tool kit is located in the luggage compartment lid.

Loosen the wingnut to open.

Windshield wiper blades



- 1 Rotate the wiper arm completely out from the windshield
- 2 Position the wiper blade at an angle and pull the release spring (arrow)
- 3 Fold the wiper blade down and unhook it toward the windshield
- 4 Pull the wiper blade past the wiper arm toward the top
- 5 Insert a new wiper blade and apply pressure until you hear it engage.

 Use only BMW approved wiper blades. ◀

Lamps and bulbs

The lamps and bulbs make essential contributions to the safety of your vehicle. Therefore, comply fully with the following instructions during bulb replacement. If you are not familiar with any of the procedures, consult your authorized BMW center.



Do not touch the glass portion of a new bulb with your bare hands since even small amounts of impurities burn into the surface and reduce the service life of the bulb. Use a clean cloth, paper napkin, or a similar material, or hold the bulb by its metallic base. ◀

A replacement bulb set is available from your BMW center.




Whenever working on the electrical system, switch off the electrical accessory you are working on or disconnect the cable from the negative terminal of the battery. Failure to do this could result in short circuits.

To prevent injuries and damage when changing a bulb, be sure to comply with any instructions provided by the bulb manufacturer. ◀

Lamps and bulbs

Low/high beam headlamps

- ▷ Low beams: H7 bulb, 55 watts
- ▷ High beams: H7 bulb, 55 watts

 The H7 bulb is pressurized. Therefore, wear safety glasses and protective gloves. Failure to comply with this precaution could lead to injury if the bulb is damaged during replacement. ◀

Please contact a BMW center in case of a malfunction.

Parking lamps

5-watt bulb

Please contact a BMW center in case of a malfunction.



When cleaning the headlamps, please observe the following: do not wipe dry with a cloth (this causes scratches). Never use abrasives or strong solvents to clean the covers. Remove dirt and contamination (such as insects) by soaking with BMW Car Shampoo and then rinsing with ample water. Always use a deicer spray to remove accumulated ice and snow – never use a scraper. ◀

Xenon lamps*

The service life of these bulbs is very long and the probability of a failure is very low, provided that they are not switched on and off an unusual number of times. If one of these bulbs should nevertheless fail, it is possible to continue driving with great caution using the fog lamps, provided traffic laws in your area do not prohibit this.



Because of the extremely high voltages involved, any work on the xenon lighting system including bulb replacement should be carried out by technically-qualified personnel only. Otherwise, there is a risk of fatal injury. ◀

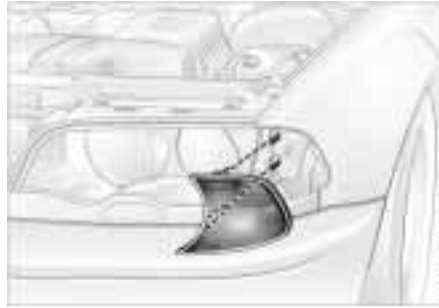
140 Lamps and bulbs



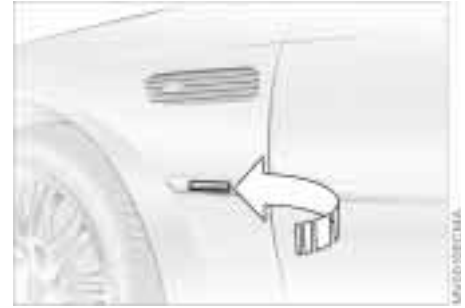
Front turn signal indicator

21 watt bulb

- 1 Using a screwdriver, release the inner hook through the upper opening
- 2 Remove lamp by pulling it out toward the front
- 3 Applying light pressure, turn the bulb to the left. Remove and exchange the bulb



- 4 Insert the 2 pins on the lamp into the guides on the vehicle
- 5 Push the lamp in. Carefully apply pressure until you hear it snap into place.



Side turn signal indicator

5 watt bulb

- 1 Use finger pressure against the rear end of the lens (arrow) to press it forward for removal
- 2 Apply gentle pressure to the bulb while turning it to the left to remove.



Front fog lamps

HB4, 55 watt bulb

! The bulb is pressurized. Therefore, wear safety glasses and protective gloves. Failure to comply with this precaution could lead to injury if the bulb is damaged during replacement. ◀

Please contact a BMW center in case of a malfunction.

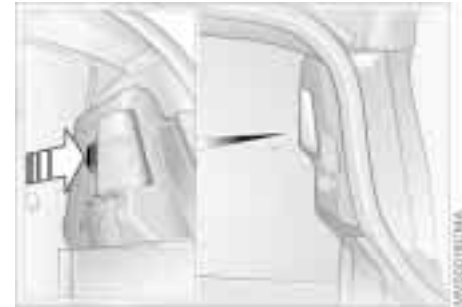


Tail lamp assembly

Tail lamps (4): bulbs 21/4 watts
Remaining bulbs: 21 watts

- 1 Turn signal
- 2 Backup lamps
- 3 Tail lamp
- 4 Tail lamp/Brake lamp

yellow
white
red
red

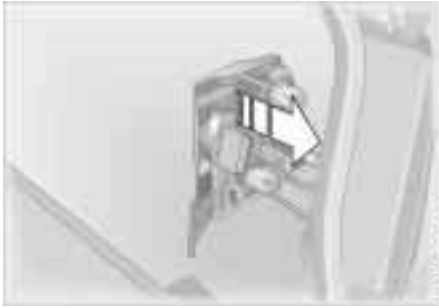


The illustration shows the right-hand luggage compartment opening.

Bulbs in the fender

All of the bulbs are integrated in a central bulb holder.

- 1 Releasing the bulb holder (arrow)

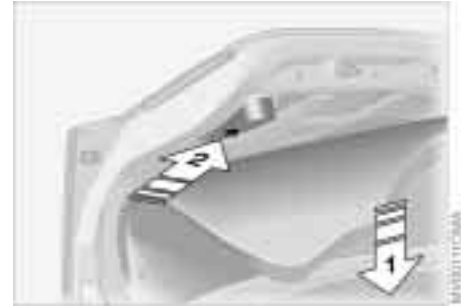


- 2 Removing the bulb holder
- 3 Unplug the power supply receptacle
Set the bulb holder aside (on the luggage compartment floor, for example)
- 4 Applying light pressure, turn the bulb to the left. Remove and exchange the bulb
- 5 Plug in the power supply receptacle
- 6 Reattach the bulb holder until you hear it snap into place (Illustration).



Bulbs in the luggage compartment lid

- 1 Using a screwdriver, loosen the clip



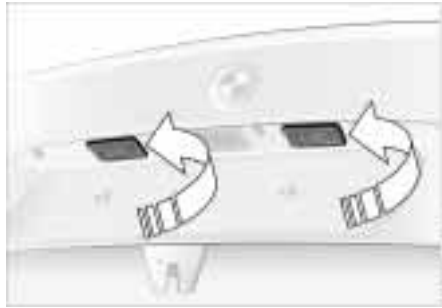
- 2 Fold the trim panel down (arrow 1).
Disengage the bulb holder (arrow 2) and remove it
- 3 Applying light pressure, turn the bulb to the left. Remove and exchange the bulb
- 4 Press the bulb holder into position until you hear it engage
- 5 Reinstall the trim with the clip.



Center (high-mount) brake lamp

LED light bar on the rear window.

Please contact a BMW center in case of a malfunction.



License plate lamps

5 watt bulb

- 1 Place a screwdriver in the slot and press toward the left (arrow) to release the lens
- 2 Replace the bulb.



Interior lamps

Front:

Interior lamps (6 watt bulb)

Reading lamps (2 x 6 watt bulbs)

- 1 Using a screwdriver, press the lamp out toward the front
- 2 Turn the bulb holder to the left and remove it
- 3 Remove and replace the bulb.



Rear:

Interior lamp (6 watt bulb)
Reading lamp (6 watt bulb)

- 1 Press the lamp out using a screwdriver
- 2 Turn the bulb holder to the left and remove it
- 3 Remove and replace the bulb.



Lighted make-up mirror

10 watt bulb

- 1 Remove the bulb housing – use a screwdriver if necessary
- 2 Replace the bulb.

Footwell lamps

5 watt bulb

- 1 Press the lamp out using a screwdriver
- 2 Replace the bulb.

Glove compartment lamp

5 watt bulb

- 1 Press the lamp out using a screwdriver
- 2 Replace the bulb.

Luggage compartment lamps

One lamp each in the bulb holder of the tail lamp assembly: 10 watt bulb.

- 1 Apply a screwdriver to the recess and remove the lens
- 2 Replace the bulb.

Repairing a flat tire



Precautions in case of a flat tire:

Stop the vehicle as far as possible from passing traffic; switch on the hazard warning flashers.

Switch on the hazard warning flashers. Turn the steering wheel to the straight-ahead position, remove the key and engage the steering lock. Shift into 1st or reverse gear and engage the parking brake.

All passengers should be outside the vehicle and well away from your immediate working area (behind a guardrail, for instance).

If a warning triangle or portable hazard warning lamp is available, set it up on the roadside at an appropriate distance from the rear of the vehicle.

Comply with all safety guidelines and regulations. ◀

M Mobility system

With the BMW M3, you will find an M Mobility system for fixing flat tires. With the aid of this system, you can apply a liquid sealant to the inside of the tire, thereby sealing off the damaged area, and then continue driving.

The M Mobility system makes transporting a spare wheel superfluous, thereby reducing the amount of weight you have to carry around.

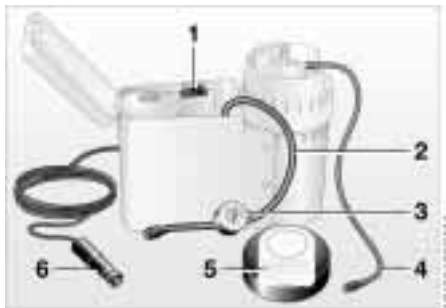


The M Mobility system is located in the luggage compartment under the floor panel:

- 1 Lift up the floor panel
- 2 Loosen the M Mobility system from its storage location.





Note that the fluid bottle in the system's sealant container must be replaced every 3 years by your BMW center if the system is not used. ◀

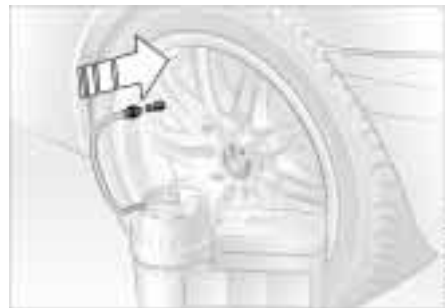


The components of the M Mobility system

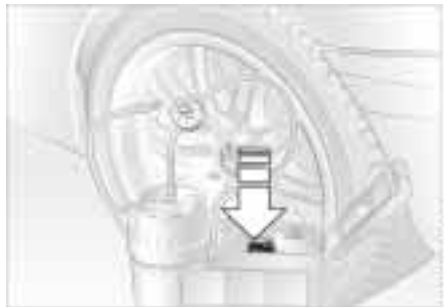
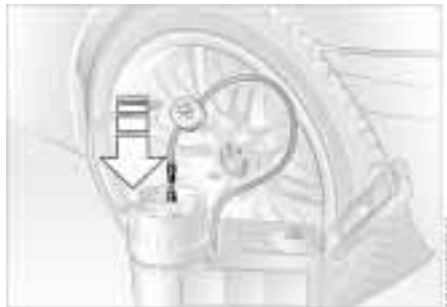
- 1 On/Off switch
- 2 Connection hose with pressure gauge for connecting the compressor with the sealant container or to connect the compressor to the wheel
- 3 Pressure gauge for indicating the tire pressure
- 4 Connector hose from the sealant container to the wheel
- 5 Sticker for maximum speed
- 6 Plug and cable for the cigarette lighter socket
- 7 Protective gloves (not shown).

Use the M Mobility system

-  If possible, leave the foreign object in the tire. ◀
-  Do not exceed the maximum speed limits described below, otherwise accidents could result. Before you use the M Mobility system, read the warnings and danger notices on the device carefully. ◀



- 1 Pull sticker 5 off for speed limit and affix it to the steering wheel
- 2 Remove the round cover and take out hose 4. Unscrew the valve stem cover from the defective wheel and screw the hose to the valve



- 3 Flip open the cover and pull out the enclosed protective gloves. Take out hose 2 with the pressure gauge and screw it to the terminal for the sealant container as shown in the illustration
- 4 Make sure that the system has been switched off (position 0). Take out the plug 6 and insert it into the cigarette lighter socket in the passenger compartment (refer to page [93](#))
- 5 Make sure that the screw on the rear of pressure gauge 3 is tightened down. Turn on the M Mobility system (position I, refer to illustration) and allow three minutes to elapse to let the sealant flow in. It does not matter afterward what the tire's inflation pressure is
- 6 Turn the device off. Disconnect the connector hose from the sealant container and the tire valve. Stow the M Mobility system in the luggage compartment


- 7 Then immediately drive at least 1.2 miles (2 km), so that the liquid sealant distributes evenly throughout the inside of the tire. Do not exceed 40 mph (60 km/h), and if possible, do not drop below 10 mph (20 km/h). Stop at an appropriate spot



8 Take out the hose with the pressure gauge and screw it onto the valve. Take out the plug and plug it into the cigarette lighter socket in the passenger compartment

9 Inflate the tire pressure:

- ▷ To increase the tire pressure: turn on the M Mobility system (position I). To check the new tire pressure briefly turn off the device
- ▷ To reduce the tire pressure: turn the screw on the back of the pressure gauge; this will open the air release valve

 If the air pressure won't hold, still carry out step 10 and then repeat steps 7 through 10 again.

The use of the M Mobility system may be ineffective if the damaged area in

the tire is larger than approx. 0.16 in (4 mm). Please consult the nearest BMW center if the tire cannot be temporarily repaired with the M Mobility system. ◀

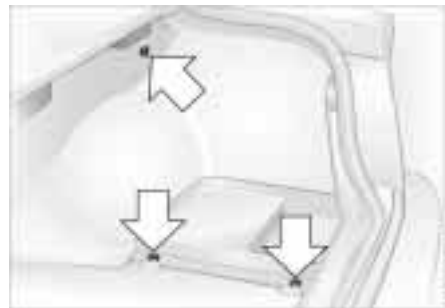
10 Unscrew the hose from the valve and stow the M Mobility system in the luggage compartment.

After the flat tire has been fixed and you start driving again, do not exceed a maximum speed of 50 mph (80 km/h).

You will find corresponding instructions for using the M Mobility system on the device.

Replace the defective tire as soon as possible and have the new wheel/tire balanced. Re-initialize the Tire Pressure Warning system (RDW), refer to page 78 for further information. Have the M Mobility system refilled. Contact your BMW center for this.

Battery



Battery location

The battery is located at the right-rear of the luggage compartment. Raise the luggage compartment floor panel (refer to page 39). Using a screwdriver or a coin and ¼ turn, release both of the caps as shown in the illustration, taking them out along with an additional cap in the top center of the right side trim panel. Remove the fasteners. In order to remove the storage tray, slide the side trim panel slightly upward.




Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling. ◀



Charge condition


You can read the charge condition of the battery with the "Magic Eye*" (a hydrometer):

- ▷ Green: adequate charge
- ▷ Black: not charged adequately. The battery must be recharged. Please contact your BMW center for additional information
- ▷ Yellow: replace the battery.

 The projected service life of the battery can only be reached if the battery is fully-charged at all times. If the vehicle is primarily used for stop-and-go traffic, be sure to check the charge state often. ◀

Maintenance

The battery is completely maintenance-free. That means that the original battery acid will normally last for the service life of the battery under moderate climate conditions.

 For all questions that regard the battery, please consult your BMW center. Since the battery is absolutely maintenance-free, the following information is for your use only. ◀

Symbols

You will find the following symbols on your car battery. For your safety, please be cautious whenever you work with or near the battery.



Before handling the battery, please read the following information.



A highly-explosive gas is generated when the battery is charged.



Never allow sparks or open flame near the battery. Do not smoke in the vicinity of the battery. Avoid creating sparks when working around electrical cables or equipment. Turn the key to position 0 in the ignition when disconnecting or connecting the battery. Don't short-circuit the battery terminal. If you do so, you could be injured by electrical sparks.



In order to protect the battery case from ultraviolet radiation, do not place it in direct sunlight. A discharged battery can freeze. Store the battery in areas where temperature remains above freezing.



Battery acid is extremely corrosive. Wear eye protection and protective gloves. Do not tip the battery. Battery acid can leak from the ventilation openings.



Be sure that children keep well away from batteries and battery acid.



Wear eye protection. Do not allow particles containing battery acid or lead to come into contact with your eyes, your skin, or your clothing.



If you happen to get acid in your eyes, rinse thoroughly for 15 minutes with clear water.

Following that, consult a physician immediately. If your skin or clothing are splashed with acid, rinse immediately with plenty of soap and water. If acid is accidentally swallowed, consult a physician immediately.

Removal and installation



Do not disconnect the battery when the engine is running. Disconnecting the battery cable when the engine is running will cause a voltage surge which will damage the vehicle's onboard electronics. Do not make any modifications in the wires to the positive terminal. If you do so, the protective function of the safety battery terminal is no longer ensured. Repairs and disposal may only be performed by specially-trained personnel. ◀

When removing the battery, disconnect the cable on the negative terminal first, then the cable on the positive terminal. Loosen the center adjusting screw on the battery retaining strap (use the screwdriver included with the onboard tool kit) and disconnect the strap.

When installing a battery, connect the positive terminal first, then connect the negative terminal.



When installing a battery, be sure that it is mounted properly and that the retaining bracket is installed with the center adjustment screw. If this is not done, the battery will not be adequately secured in case of an accident. ◀

Charging the battery

Charge the battery in the vehicle only when the engine is not running.



Before performing any work on the electrical system, disconnect the cable from the negative terminal. If you do not, short circuits can create the risk of fire or personal injury. ◀

If you plan to park the vehicle for longer than 4 weeks, disconnect the battery from the vehicle electrical system by disconnecting the cable at the negative terminal. Then recharge the battery with an appropriate battery charger.

If you intend to store the vehicle for longer than 12 weeks, remove the battery, charge it and store it in a cool and dust-free room where there is no danger of freezing. During storage, have the battery recharged every 3 months. Also, recharge the battery before it is reinstalled. If this is not done, the battery will not be serviceable. Every time the battery is drained, especially over extended periods, its service life is reduced.

Battery



Return used batteries to a recycling point or your authorized BMW center. Maintain the battery in an upright position for transport and storage. Secure the battery against tilting in transit. ◀



Storage periods during which the battery is disconnected are not taken into consideration by the Service Interval Display for changing the brake fluid.

For this reason, be sure that the brake fluid is changed every two years, regardless of the information displayed. Please read the information on page [126](#). ◀

Fuses



If an electrical accessory should fail, switch it off and check the fuse.

In glove compartment

- 1 Open the glove compartment and turn the two white quick-release fasteners outward. Spare fuses and plastic tweezers are located on the fuse holder
- 2 Use the plastic tweezers to remove the fuse for the accessory or equipment that has stopped working
- 3 Replace a blown fuse, recognizable by its melted metal strip, with a new fuse that has the same color or ampere rating.

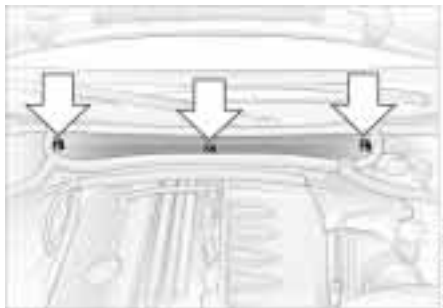
A list of fuses, their respective ampere ratings and the equipment in their circuits is provided below the fuse holder.

To close the fuse holder, snap it into position at the top and turn the two fasteners inward.

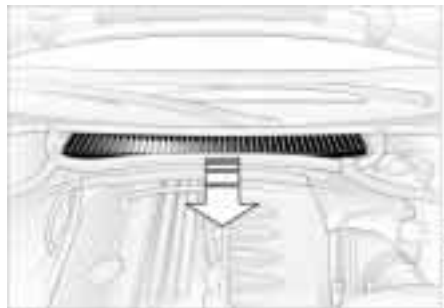


Do not attempt to repair a burned fuse or replace it with a fuse having a different color or ampere rating. To do this could cause a fire in the vehicle resulting from a circuit overload. ◀

If the fuse continues to burn through, have the problem taken care of by a BMW center.



- 1 Open the hood
- 2 Release the three fasteners (arrow) with a ¼ turn
- 3 Remove the filter cover

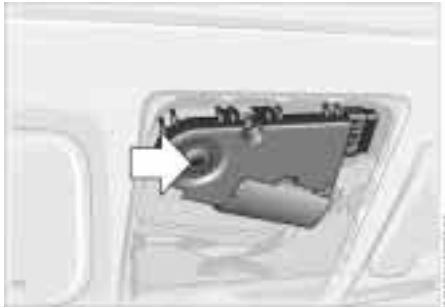


- 4 Remove the filter by pulling toward the front and install a new one
- 5 Position the filter cover and secure it with the three fasteners.



Manual release

Pull the knob with the fuel pump symbol (arrow) on the right trim panel of the luggage compartment.




Manual operation

- 1 Remove the interior lamp (refer to page [143](#)), reaching into the opening and pushing out the panel
- 2 Use an Allen wrench from the onboard tool kit (refer to page [138](#)) to turn the sunroof's steel crank in the desired direction.

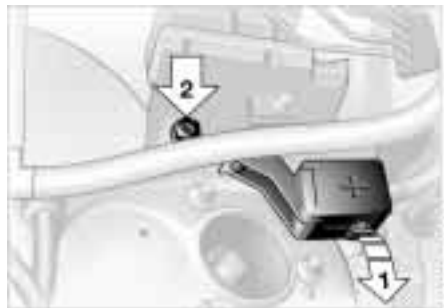
Do not use spray starter fluids to start the engine.

If the battery is discharged, the engine can be started using two jumper cables and another vehicle's battery. Use only jumper cables with fully insulated handles on the terminal clamps.


 Do not touch high-voltage wiring and cables on a running engine. There is a risk of fatal injury if you do this.

Carefully comply with the following instructions to avoid personal injury or damage to one or both vehicles. ◀

- 1 Be sure that the battery on the support vehicle is also rated at 12 volts, and that the capacities of the two batteries (Ah) are roughly comparable (printed on casing)
- 2 Leave the discharged battery connected to the vehicle's electrical system
- 3 Make sure that there is no contact between the bodywork of the two vehicles – short circuit risk

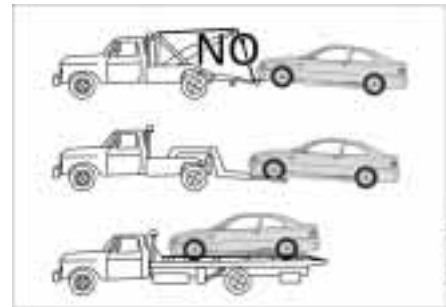


- 4 Start by connecting the jumper cable from the positive terminal of the support vehicle to the positive terminal connector located in your BMW's engine compartment. The cover of the positive terminal connector is marked with a "+" sign. Refer to the illustration by pulling the tab (arrow 1)
- 5 Then connect the negative terminals. Attach the cable to either the support vehicle's negative battery terminal (-), or to a suitable ground on its engine or bodywork. Then connect the other end of the cable to a ground on the engine or on the bodywork of the vehicle that is to be started. There is a special nut provided for this on the BMW (arrow 2)

 Follow the same sequence for connecting the jumper cables if you assist in jump-starting another vehicle. If you do not, there is a risk of injury caused by spark generation at the battery. ◀

- 6 Start the support vehicle's engine and let it run
- 7 Start the engine on the vehicle needing the jump-start, and allow it to run as usual. If the first start attempt is not successful, wait a few minutes before another attempt in order to allow the discharged battery to recharge
- 8 Before disconnecting the jumper cables from your BMW, turn on the rear window defroster and set the blower to the highest speed; allow the engine to run approx. 10 seconds. This will prevent a voltage surge from the voltage regulator to the electrical accessories
- 9 Then disconnect the jumper cables in reverse sequence.

Depending on the cause of the fault, recharge the battery.



Tow fitting

The tow fitting, which can be unscrewed, is in the luggage compartment under the floor mat and must remain in the vehicle. This fitting is designed for installation in the tow sockets located at the front and rear of the vehicle. It is intended for towing on paved road surfaces only. This fitting should not be used to pull a vehicle out of deep snow, mud, sand, etc. Always comply with all applicable towing laws and regulations.

Access to tow sockets

Front:

Press out the cover panel with a screwdriver above on the recess.

Rear:

Press out the cover panel with a screwdriver above on the recess.



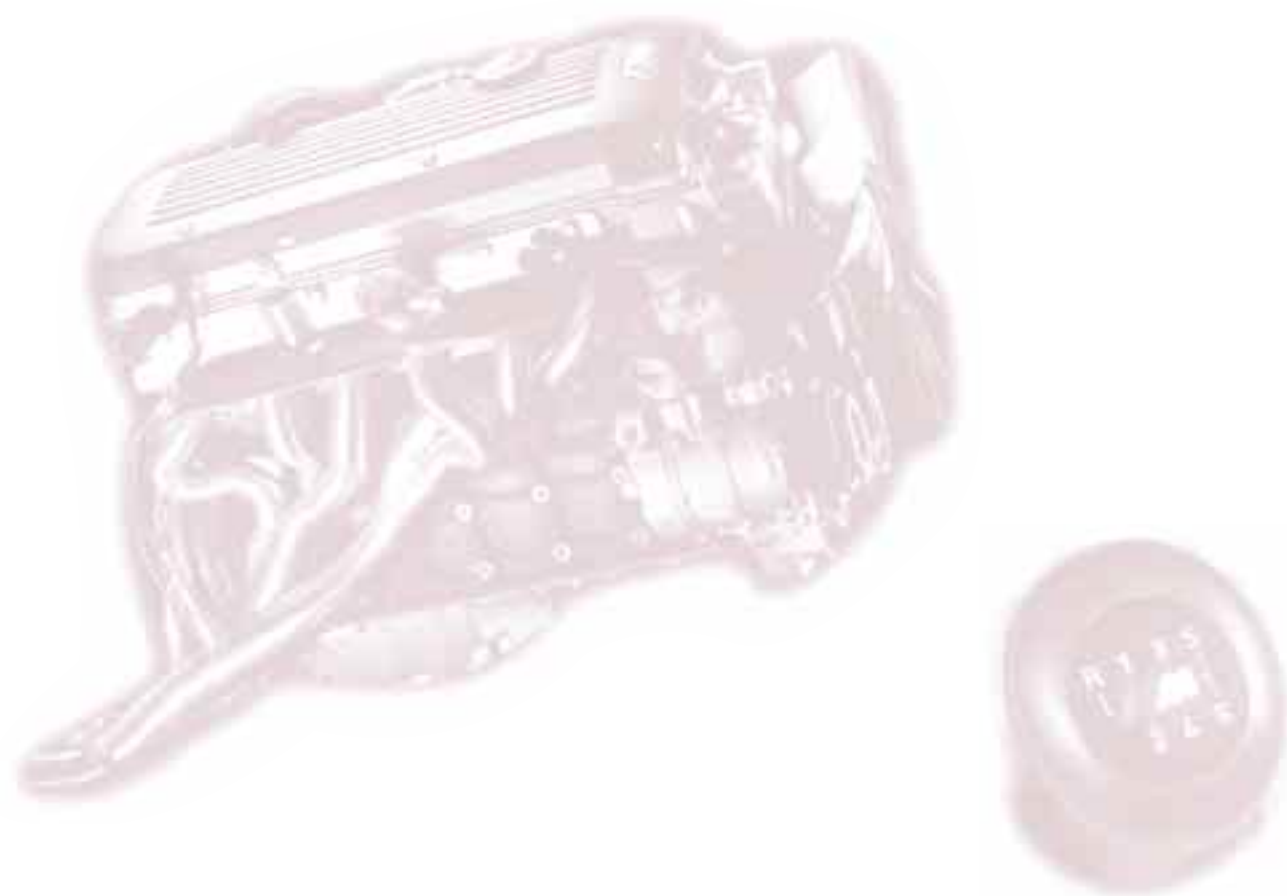
Screw the tow fitting in until it bottoms firmly. If this is not done, the threads could be damaged. Do not tow the vehicle by any components of the running gear, or lash them down in any way. If you do, the components could be damaged, leading to possible accidents. Do not use any other tow-fitting except the one provided with your vehicle. ◀

Towing with a commercial tow truck

- ▷ Do not tow with sling-type equipment
- ▷ Use wheel lift or flat bed equipment
- ▷ Please comply with applicable state towing laws.



Never allow passengers to ride in a towed vehicle for any reason. Never attach tie-down hooks, chains, straps, or tow hooks to tie rods, control arms, or any other part of the vehicle suspension, as severe damage to these components will occur, leading to possible accidents. ◀



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Deceleration sensors continuously monitor the physical forces acting upon the vehicle. If there is a deceleration because of a head-on collision in which the protection normally afforded by the safety belts is no longer sufficient by itself, then the gas generators for the front airbags will be simultaneously ignited on both the driver and passenger sides. However, the passenger-side airbag is only triggered if an additional sensor has recognized that the passenger seat is occupied.

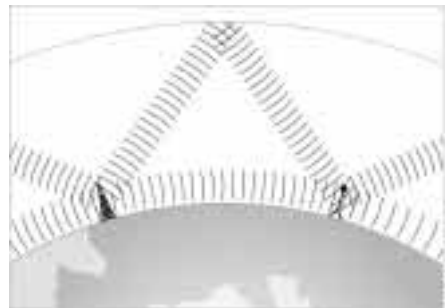
In the event of a side impact, the front head and side airbags or rear side airbags* will deploy if necessary on the side where the impact occurs.

The airbags located under the marked covers inflate and unfold in a matter of a few milliseconds. In this process, they tear through the designed separation points of the upholstered covers or press them out.

The gas required to inflate the airbags is not dangerous, and it dissipates together with the associated smoke. The gas required to inflate the airbags is not dangerous, and the smoke associated with it dissipates.

The entire process is completed within fractions of a second.

Radio reception



The AM frequency bands (medium-wave, long-wave and short-wave) make it possible to receive stations from a great distance, because the broadcast signals travel not only along the ground as surface waves, but also as atmospheric waves that are reflected from the ionosphere.

Frequency-modulation (FM) provides substantially better sound quality than on the. However, because FM transmissions rely on line-of-sight broadcast waves, their effective reception range is limited.

Radio reception

The limitations inherent to radio reception in a moving vehicle have been minimized by a number of innovative system designs:

The "Radio Data System" (RDS) makes sure that, for broadcast stations sending on several frequencies, the radio automatically tunes to the frequency with the best reception quality.

The Diversity Antenna system employs several FM antennas integrated within the rear window to provide three separate sources for receiving broadcast waves. An integral processor automatically selects the antenna with the best FM reception quality at any given time. The selection of the antenna takes place within milliseconds, and is therefore not noticed by the radio listener.

DSC

The primary goal in developing the Dynamic Stability Control (DSC) for the BMW M3 is to achieve the greatest amount of safety while at the same time getting the most pleasure out of performance-oriented driving.

Using highly sensitive sensors, the DSC monitors current operating conditions for your vehicle as they relate to driving stability and traction. In addition, wheel speeds, steering angle, lateral acceleration, brake pressure and vehicle movement around its vertical axis are also ascertained and evaluated.

If the DSC detects unstable conditions on a curve, then the DSC will intervene in engine management within milliseconds, reducing drive torque or, if the need arises, will individually slow one or more wheels down to keep the vehicle on a steady course.

If differences in wheel speed should occur, the system will recognize the dangers associated with wheel spin and will reduce the drive torque; if necessary, it will do so using brake intervention at the rear wheels as well.

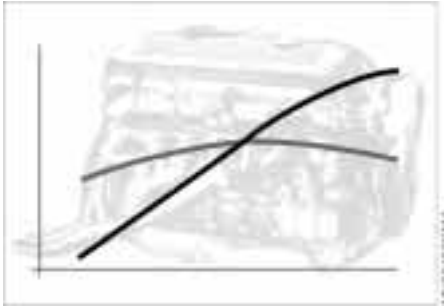
DSC offers the highest degree of driving stability and safety not only when you first start your vehicle, are driving on straightaways or when braking, but also when driving through curves.

Safety belt tensioner



The safety belt tensioner makes sure that the belt tightens during a head-on collision to ensure that occupants remain firmly positioned in their seats. A gas-pressure system retracts the buckle assembly to tension the shoulder and lap belts within fractions of a second. This reduces the tendency to slide under the lap belt.

160 M3 Engine concept



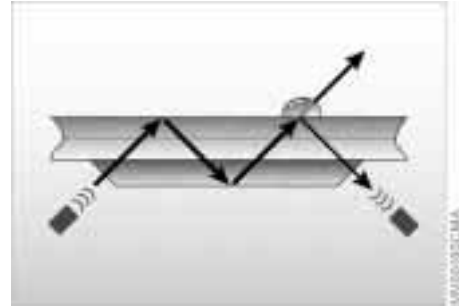
BMW M will continue to develop BMW engines for the performance-oriented, yet responsible driver. That is why value is placed on an engine design that guarantees maximum thrust over a wide engine speed range.

This is done by using high-grade materials and components with optimized details. The engine thereby produces higher speeds than can be achieved with conventional engines.

Associated with the proper transmission gear ratio and an especially performance-oriented engine electronics system, the torque opens up with this so-called "high-speed aspirated engine" extremely evenly throughout the entire engine speed range from 1,000 to max. 8,000 rpm.

In actual usage, this means improved acceleration and more spontaneous response throughout the engine speed range, thus affording more driving pleasure.

Rain sensor*



Depending on how wet the windshield is, the rain sensor controls the operation of the windshield wipers.

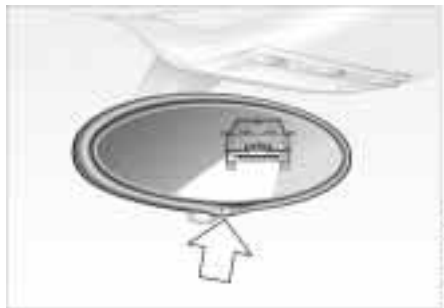
Infrared light is carried along the surface of the windshield in an optical conductor in such a manner that it is reflected completely when the windshield is dry. The quantity of reflected light is measured.

If there is moisture on the glass, the amount of light reflected is reduced since the infrared light at the surface of the windshield can escape. The quantity of reflected light is thus a means of gauging the degree of wetness on the windshield.

Rain sensor*

When the "intermittent wiper" speed position is selected, the wiper reacts immediately if water is splashed onto the windshield from vehicles traveling ahead, for example. As a result, the rain sensor contributes to driving safety and comfort.

Interior rearview mirror, automatic dimming feature 161



The interior rearview mirror with automatic dimming feature reduces blinding from following traffic by adapting the intensity of the reflected images to correspond to levels of light registered by the unit's sensors. The mirror reverts to its undimmed setting as soon as the light source disappears. One lamp sensor is mounted on the front of the mirror housing. This sensor is directed forward. It measures light intensity in the area ahead of the vehicle. The second sensor is integrated within the mirror's glass. The electronic control system compares the light intensity from front and rear. The difference provides the basic parameter used to modulate an electrical current and induce chemical changes in a semisolid layer incorporated in the mirror glass.

The semisolid reacts chemically to this electrical current, thus providing infinitely-variable dimming of the mirror (electrochromic technology).

As a result, it is no longer necessary to dim the mirror manually, and the driver can concentrate completely on traffic conditions.



All of the important electrical and electronic systems in the vehicle are tested regularly and automatically – the driver does not have to perform any extra operations or adjustments.

The indicator lamps also come on briefly after the ignition has been turned on.

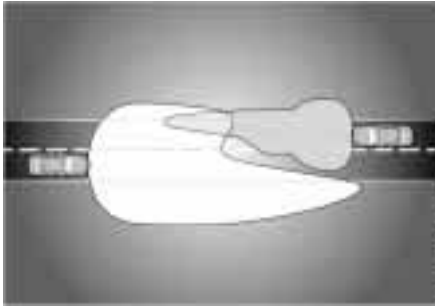
In the same manner, the electrical resistance of the airbag ignition generators and all of the remaining airbag components are constantly being measured. Any fault in this system would be detected immediately by a current fluctuation that would necessarily accompany it. The fault would be indicated immediately by the airbag warning lamp.

Even after you shut off the engine, the overall functional status of your vehicle is monitored. For example, all of the flaps of the heating and ventilation system travel to the nearest limit position. This action ensures that the defrost function will be preserved, regardless of the circumstances, even if, for example, a malfunction in the heating or ventilation system should occur during the night while the vehicle is parked.

A calibration cycle runs every tenth time the engine is shut off. During this cycle, the actuator motors of all the heating and ventilation flaps travel to their limit stops in both directions. The limit positions and the return travel paths are checked in this manner in order to ensure that appropriate adjustments for the operating elements can be made at any time.

You can hear the vent flaps of the heating or ventilation system performing their self-diagnostics routine after turning off the ignition. All of the other self-diagnostics functions operate silently in the background.

Any possible faults detected during these self-diagnostics can be read out and corrected by your BMW center during the next regularly scheduled maintenance.



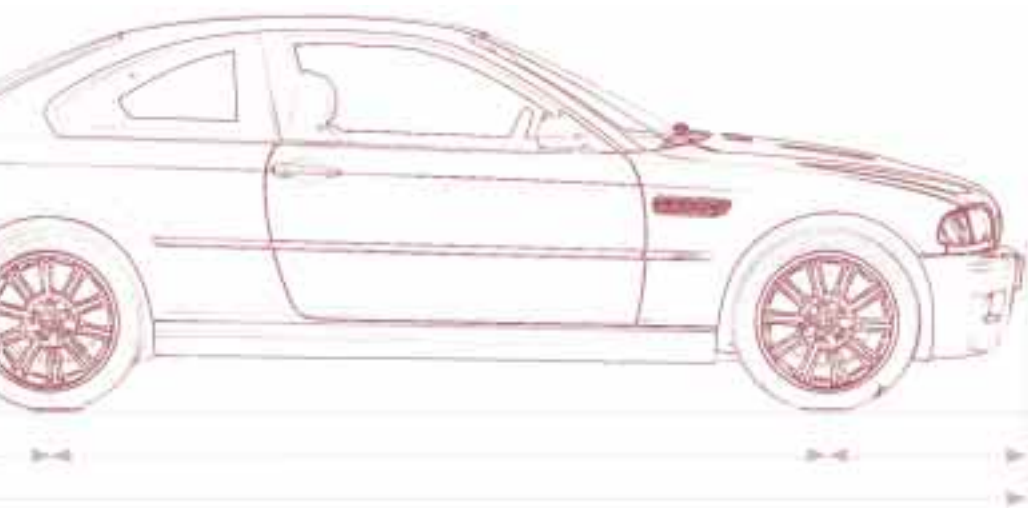
The xenon lamp provides forward illumination with significantly more brightness and uniformity than the traditional halogen lamp.

In a xenon lamp, an electric arc replaces the filament in order to generate intense illumination. A gas mixture in a quartz glass tube with metal vapor is ignited by a high electric voltage. The arc that is generated is then sustained by a lower voltage. When the lamp is turned, on there is a brief warm-up period. Maximum brightness is attained in approx. 15 seconds.

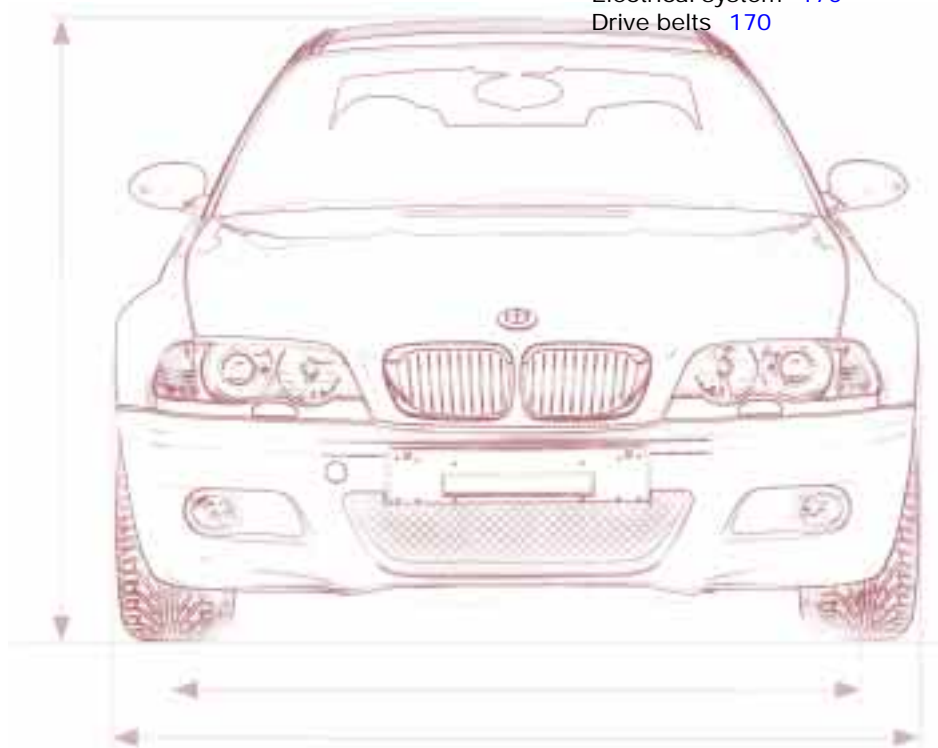
Xenon lamps improve the driver's visibility and orientation to the road, especially in adverse weather conditions and driving situations (driving at night in heavy rain or through road repair areas where there are no lane markers, for instance).

Vehicles with xenon lamps are equipped with automatic headlamp range control. As a result, the highway is always optimally lighted, regardless of load conditions, and drivers in oncoming traffic are not blinded.

Xenon lamps make a significant contribution to highway safety since other highway users, bicyclists and motorcyclists in the right lane, and pedestrians are more easily detected.



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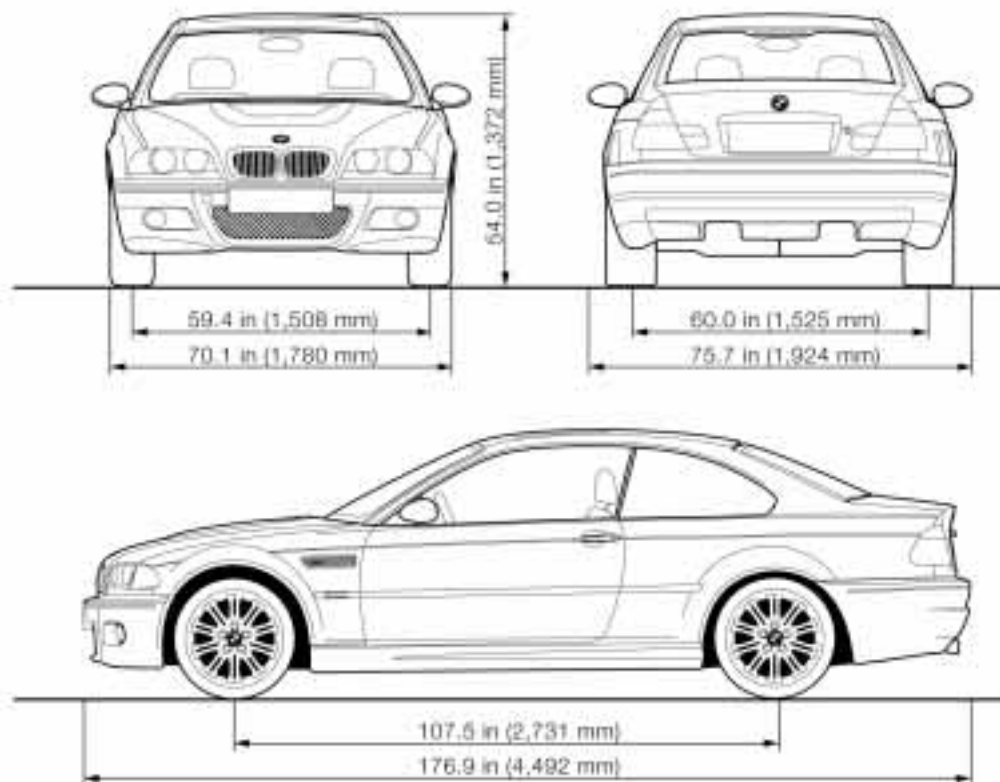
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166 **Engine data**

Displacement	cu in (cm³)	198.1 (3,246)
Number of cylinders		6
Max. output at engine speed	hp (kW) rpm	333 (245) 7,900
Maximum torque at engine speed	lb-ft (Nm) rpm	262 (355) 4,900
Compression ratio	ε	11.5
Stroke	in (mm)	3.58 (91)
Bore	in (mm)	3.43 (87)
Fuel-injection system		Digital electronic engine-management system



Smallest turning radius dia.: 36.1 feet (11.0 m).

Curb weight (with one person, ready for operation, full tank of fuel, options not included)		
	lbs. (kg)	3,415 (1,549)
Approved gross vehicle weight	lbs. (kg)	4,453 (2,020)
Approved front axle weight	lbs. (kg)	2,138 (970)
Approved rear axle weight	lbs. (kg)	2,535 (1,150)
Approved roof load capacity	lbs. (kg)	165 (75)
Luggage compartment capacity	cu ft (l)	14.5 (410)

Permitted axle loads and permitted total vehicle weight may not be exceeded.

			Notes
Fuel tank	gal. (liters)	approx. 16.6 (approx. 63)	Fuel specification: page 26
Reserve	gal. (liters)	approx. 2.1 (approx. 8)	
Windshield washer system/ Headlamp washer system	quarts (liters)	approx. 5.6 (approx. 5.3)	For details: page 122
Cooling system including heater circuit	quarts (liters)	approx. 6.3 (approx. 6.0)	For details: page 125
Engine oil and filter change	quarts (liters)	approx. 6.9 (approx. 6.5)	BMW High Performance Synthetic Oil For details: page 124
Manual transmission and differential	–	–	Changing the oil during the breaking-in inspection, after which it is considered permanently filled and not changed again

170 **Electrical system**

Battery

12V, 70 Ah

Spark plugs

NGK DCPR8EKP

Drive belts

Water pump – Generator –

Power steering

Drive belt 6 PK x 1470

Compressor for the automatic

climate control

Drive belt 5 PK x 829



You can obtain Original BMW Parts and Accessories, as well as professional advice from your BMW center. ◀

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So that you will have important specifications available when you stop to refuel, we recommend that you supplement this table with data which apply to your vehicle.

Refueling

BMW recommends Castrol



Fuel

Designation	Premium Unleaded Gasoline
AKI: minimum	91

Engine oil

Quality	
---------	--

The oil volume between the two marks on the oil dipstick corresponds to approx. 1.1 US quarts (1 liter).

Tire inflation pressures

		Summer		Winter	
		Front	Rear	Front	Rear
4 persons					
5 persons or 4 plus luggage					

**We wish you an enjoyable
driving experience.**



The Ultimate Driving Machine

M3 Coupe US-En